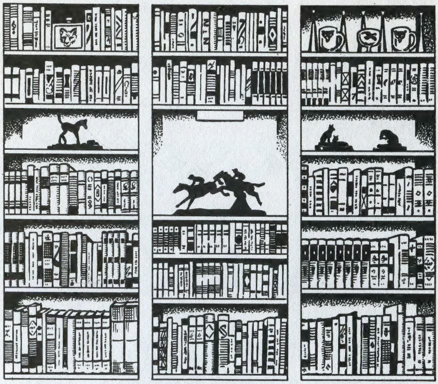

Very scarce.

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A

GUIDE

TO

THE TURF.

By T. GARD,

Author of the Odds and Chances of Cocking, Hazard, and other Games.

SECOND EDITION, WITH CORRECTIONS.

LONDON:

Printed by Reynell and Sons, Piccadilly,

AND SOLD

At the Racing Calendar Office, No. 7, Oxenden-street, Haymarket.

1809.

Price, 10s. 6d.

ADVERTISEMENT.

THE following Treatise is intended as a Guide to young Adventurers, to lay their bets to the best advantage, and as a Manual to the more accomplished Sportsmen. I will not contend for the importance of it to the community; but its general utility must be obvious to every Gentleman of the Turf.

I have endeavoured to state the various questions in the simplest and most accurate manner; and every solution is proved by Hedging. How far I have succeeded, I leave to superior judgments to decide.

The

The first part consists of the various Changes of Two, Three, and Four Events ; the Second, Instructions how to bet against a Field; the Third, how to bet between Two in a Field, neither win no bet; the Fourth and last part consists of Tables of Two and Three Events, from six to one for you, to six to one against you; in which may be seen, at one view, the accurate odds in every change.

A

GUIDE, &c.

THE laws of chance, on the various bets which are to be laid at horse-racing, are here elucidated, explained, and laid down, with the different methods of hedging to the different kinds of bets; and in so conspicuous a manner, as to enable any gentleman to lay his complicated bets either accurately or nearly, as it suits him.

In the first place, you are to take notice, that the probability of an event happening is to the probability of its failing, as the number of different ways by which it may happen, is to the number of different ways by which it may fail; and is greater or less, according to the number of chances whereby it may happen or fail. Thus, if I have an event of three to two in my favour, it may be represented in vulgar fractions thus, $\frac{3}{5}$; and if

it were three to two against me, my value in that stake would be $\frac{2}{5}$, as the whole stake depending is five: the first being three to two for me, consequently entitles me to three-fifths of the whole stake; and where it is three to two against me, my value in that stake is only two-fifths, as represented in the fraction.

Suppose there are two events: even betting on the first, which I shall call *A*; and five to four in favour of the second, which I shall call *B*; What are the accurate odds which I am to lay you against *A* and *B* both winning?

Here *A* is entitled to one half of the first event; but as that event depends upon the event of the other, he who takes the odds against *A* and *B* both winning, is only entitled to one half of five-ninths of the whole stake, or the sum depending; and it is operated in vulgar fractions by multiplying the two numerators together for a new numerator, and the two denominators for a new denominator: thus $\frac{1}{2} \times \frac{5}{9} := \frac{5}{18}$ $18 - 5 = 13$ to 5, which shews it to be 13 to 5 against *A* and *B* both winning. In this operation, by multiplying the two numerators together, you have five for

for a new numerator; and by multiplying the two denominators together for a new denominator, you have eighteen, which shews the value of *A* and *B* both winning to be $\frac{5}{18}$; and by subtracting the numerator five from the denominator eighteen, the remainder is thirteen: therefore, it is thirteen to five against *A* and *B*, as before.

As the different algebraical signs or characters which I shall make use of in the different operations, may fall under the hands of those who are unacquainted with them, I here give the notation for each sign, as they will help to facilitate the different operations.

$+$, this is called more; and answers for addition.

$-$, this is called less; and answers for subtraction.

$\times$, this for involution or multiplication.

$=$, this for equality, or equal to.

When you want to know the odds on two, three, or more different events, you are first to be particular in setting down fractionally the value which you are entitled to in each event, and the dependency that one event has on another.

Suppose there are two events, even betting on each, what are the odds which I am to bet you, that you do not name the two winners?

In this, your value or expectation on both events is one half of one half, and is set down in vulgar fractions, and operated thus: $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$: $4 - 1 = 3$ to 1: therefore, three to one are the odds which I am to bet you, that you do not name both the winners; and is proved by hedging, thus: supposing that I had laid you three guineas to one, that you did not name both the winners, I am then to bet one guinea, that you win the first (in hedging, you are to take notice, that in most cases you are to begin with the sum which you lay the odds to, continuing the aggregate sum till all the events are decided); and if you win that, I am then to bet two guineas that you win the second; if you do, I then win three guineas by hedging, which serves to pay the three guineas that I had laid to one against your winning both; and is a convincing proof of the fractional operation being just.

Suppose

Suppose there are two events, even betting on the first, and six to four on the favourite in the second, what are the odds which I am to lay you, that you do not name both the winners?

$\frac{1}{2} \times \frac{3}{5} = \frac{3}{10}$: $10 - 3 = 7$ to 3, which shews it to be seven to three, that I am to lay you against naming both the winners; and is proved by hedging, thus: on the first event, I lay three guineas that you win it; and on the second, I am to lay six to four that you win that; both those events you are supposed to win; (and I shall continue you the winner in all the following cases, where I lay down the method of hedging to each event, till all the events are over) my aggregate sum is then ten guineas, and by taking the three guineas from it, which I began to hedge with, there will be seven left, which will pay the seven to three which I laid you against your naming both the winners.

What are the odds which I am to lay you, that you do not lose both events?

$\frac{1}{2} \times \frac{2}{5} = \frac{2}{10}$: $10 - 2 = 8$, which shews it to be

eight

eight to two, or contracted, is four to one that you do not lose both.

PROOF BY HEDGING.

I am, on the first, to bet one guinea; and on the second I am to take three to two: so here I win four by hedging, which pays the four I lost with you.

Suppose it to be even betting on the first, and seven to four in your favour on the second, what are the odds which I am to lay you against your winning them both?

$\frac{1}{2} \times \frac{7}{11} = \frac{7}{22}$: $22 - 7 = 15$ to 7, the answer.

PROOF BY HEDGING.

I am to bet seven guineas, that you win the first; and on the second I am to bet fourteen to eight: here I win by hedging $7 + 8 = 15$, which pays the fifteen I lost with you.

What are the odds which I am to lay you, that you do not lose both? $\frac{1}{2} \times \frac{4}{11} = \frac{4}{22}$: $22 - 4 = 18$ to 4, or 9 to 2, the answer.

PROOF BY HEDGING.

I am to bet two guineas, that you lose the first; and I am to take seven to four that you lose the second: here I get $2 + 7 = 9$, which pays you.

Suppose

Suppose there are two events, even betting on the first, and two to one on the favourite in the second, what are the odds against your naming both the winners?

$\frac{1}{2}\times\frac{2}{3}=\frac{2}{6}$: $6-2=4$ to 2, or 2 to 1, the answer.

PROOF BY HEDGING.

On the first event I bet one guinea that you win it; and on the second I bet two guineas to one: so that I get by hedging, $1+1=2$, which pays the above.

What are the odds against your losing both? $\frac{1}{2}\times\frac{1}{3}=\frac{1}{6}$: $6-1=5$ to 1, the answer.

PROOF BY HEDGING.

I am to bet one guinea that you lose the first, and on the second I am to take four to two: so that I win by hedging, $1+4=5$, which pays the above.

Suppose it to be even betting on the first event, and five to two in your favour on the second, what are the odds against your winning them both? $\frac{1}{2}\times\frac{5}{7}=\frac{5}{14}$: $14-5=9$ to 5, the answer.

PROOF

PROOF BY HEDGING.

On the first event I am to bet five guineas; and on the second I am to bet ten to four: so that I get $5+4=9$, which pays the above.

What are the odds against your losing both? $\frac{1}{2}\times\frac{2}{7}=\frac{2}{14}$: $14-2=12$ to 2, or 6 to 1, the answer.

PROOF BY HEDGING.

On the first event I bet one guinea that you lose it; and on the second I take five to two: here I get $1+5=6$, which pays the above.

Suppose it to be even betting on the first event, and three to one in your favour on the second, what are the odds against your winning both? $\frac{1}{2}\times\frac{3}{4}=\frac{3}{8}$: $8-3=5$ to 3, the answer.

PROOF BY HEDGING.

On the first I am to bet three guineas that you win it; and on the second I am to lay six guineas to two: here I get by hedging, $3+2$, which pays you.

What are the odds against your losing both? $\frac{1}{2}\times\frac{1}{4}=\frac{1}{8}$: $8-1=7$ to 1, the answer.

PROOF

PROOF.

I am to bet one guinea that you lose the first; and on the second I am to take six guineas to two: here I get by hedging, $1+6=7$, which pays the seven to one.

Suppose there are two events, five to four on each in your favour, what are the odds against your winning both?

$\frac{5}{9}\times\frac{5}{9}=\frac{25}{81}$:$81-25=56$ to 25, the answer.

PROOF.

On the first I am to lay twenty-five to twenty; and on the second I am to lay forty-five to thirty-six: in this I get by hedging $20+36=56$, which pays you.

What are the odds against the weak sides winning both? $\frac{4}{9}\times\frac{4}{9}=\frac{16}{81}$:$=81-16=65$ to 16, the answer.

PROOF.

I am to take twenty to sixteen on the first; and on the second I am to take forty-five to thirty-six: I get $20+45=65$, which pays you.

Suppose it to be five to four on the first, and six to four on the second, both in your favour,

 what

what odds am I to lay you against your winning both? $\frac{5}{9}\times\frac{3}{5}=\frac{15}{45}$: $45-15=30$ to 15, or two to one, the answer.

PROOF.

On the first event I am to bet fifteen to twelve; and on the second, twenty-seven to eighteen: in this I get $12+18=30$, which pays you.

What are the odds against the weak sides winning both events?

$\frac{4}{9}\times\frac{2}{5}=\frac{8}{45}$: $45-8=37$ to 8, the answer.

PROOF.

On the first event I am to take ten to eight; and on the second, twenty-seven to eighteen: here I get $10+27=37$, which pays.

Suppose it to be five to four on the first event, and seven to four on the second, both in your favour; what are the odds against your winning both? $\frac{5}{9}\times\frac{7}{11}=\frac{35}{99}$: $99-35=$ 64 to 35 the answer.

PROOF.

PROOF.

On the first I bet thirty-five to twenty-eight; and on the second I bet sixty-three to thirty-six: in this I get $28+36=64$, which pays.

What are the odds against your losing both? $\frac{4}{9}\times\frac{4}{11}=\frac{16}{99}$: $99-16=83$ to 16, the answer.

PROOF.

On the first I am to take twenty to sixteen; and on the second, sixty-three to thirty-six: here I get $20+63=83$, which pays.

What are the odds that you don't lose the first, and win the second?
$\frac{4}{9}\times\frac{7}{11}=\frac{28}{99}$: $99-28=71$ to 28, the answer.

PROOF.

On the first event I take thirty-five to twenty-eight; and on the second I am to lay sixty-three to thirty-six: here I get $35+36=71$, which pays.

What are the odds that you don't win the first and lose the second? $\frac{5}{9}\times\frac{4}{11}=\frac{20}{99}$: $99-20=79$ to 20, the answer.

PROOF.

On the first event I am to bet twenty to sixteen;

sixteen; and on the second, I am to take sixty-three to thirty-six: in this I get $16+63=79$, which pays.

Suppose it to be five to four on the first event, and two to one on the second, both in your favour, what are the odds against your winning them both?

$\frac{5}{9}\times\frac{2}{3}=\frac{10}{27}$: $27-10=17$ to 10, the answer.

PROOF.

On the first I lay ten to eight; and on the second I lay eighteen to nine: I get $8+9=17$, which pays.

What are the odds against your losing both? $\frac{4}{9}\times\frac{1}{3}=\frac{4}{27}$: $27-4=23$ to 4, the answer.

PROOF.

On the first I am to take five to four: and on the second I take eighteen to nine: here I get $5+18=23$, which pays.

Suppose it to be five to four on the first, and five to two on the second, both in your favour, what are the odds against your winning both? $\frac{5}{9}\times\frac{5}{7}=\frac{25}{63}$; $63-25=38$ to 25, the answer.

PROOF.

PROOF.

On the first I bet twenty-five to twenty; and on the second, I bet forty-five to eighteen: here I get $20+18=38$, which pays.

What are the odds against both the favourites being beaten? $\frac{4}{9}\times\frac{2}{7}=\frac{8}{63}$: $63-8=55$ to 8, the answer.

PROOF.

On the first I take ten to eight; and on the second I take forty-five to eighteen: here I get $10+45=55$, which pays.

Suppose it to be five to four on the first, and three to one on the second, both in your favour, what are the odds against your winning both? $\frac{5}{9}\times\frac{3}{4}=\frac{15}{36}$: $36-15=21$ to 15, the answer.

PROOF.

On the first I lay fifteen to twelve; and on the second I lay twenty-seven to nine: here I get $12+9=21$, which pays.

What are the odds against your losing both? $\frac{4}{9}\times\frac{1}{4}=\frac{4}{36}$: $36-4=32$ to 4, or 8 to 1, the answer.

PROOF.

PROOF.

On the first I take five to four; and on the second I take twenty-seven to nine: here I get $5+27=32$, which pays.

What are the odds against your losing the first, and winning the second? $\frac{4}{9}\times\frac{3}{4}=\frac{12}{36}$: $36-12=24$ to 12, or 2 to 1, the answer.

PROOF.

On the first I take fifteen to twelve; and on the second I lay twenty-seven to nine: here I get $15+9=24$, which pays.

What are the odds against your winning the first, and losing the second? $\frac{5}{9}\times\frac{1}{4}=\frac{5}{36}$: $36-5=31$ to 5, the answer.

PROOF.

On the first I lay five to four; and on the second I take twenty-seven to nine: here I get $4+27=31$, which pays.

Suppose it to be six to four on each, both in your favour, what are the odds against your winning both? $\frac{3}{5}\times\frac{3}{5}=\frac{9}{25}$: $25-9=16$ to 9, the answer.

PROOF.

PROOF.

On the first I lay nine to six; and on the second I lay fifteen to ten: in this I get $6+10=16$, which pays.

What are the odds against your losing both? $\frac{2}{5}\times\frac{2}{5}=\frac{4}{25}$: $25-4=21$ to 4, the answer.

PROOF.

On the first I take six to four; and on the second I take fifteen to ten: here I get $6+15=21$, which pays.

What are the odds against your winning the first, and losing the second? $\frac{3}{5}\times\frac{2}{5}=\frac{6}{25}$: $25-6=19$ to 6, the answer.

PROOF.

On the first I lay six to four; and on the second I take fifteen to ten: here I get $4+15=19$, which pays.

This is a remarkable case; for, if you have two equal events, it is no more than three to one against your winning them both: and in this, it being three to two in your favour in one, and three to two against you, in the other, upon a cursory view, it appears to be the same odds as laying against two equal events;

events: notwithstanding, it is obvious, both by the fractional operation, and the proof by hedging, that the odds are 19 to 6, which are $3\frac{1}{6}$ to 1.

What are the odds, that the favourites win one, and lose the other? For the solution of this I must have recourse to an algebraical method, which is, by squaring of $A+B$; and there I find it to be thirteen to twelve, that the favourites do not win one, and lose the other; and is to be proved, by hedging in a different manner from any of the former cases.

PROOF.

Supposing that I had laid thirteen to twelve, I am to begin with taking the odds to two shillings, on the first event; if the favourite loses it, I have then fifteen shillings of hedging money, including the twelve, which was the sum I laid the odds to. On the second event I am to lay the fifteen to ten, on the favourite; here if it should come off so that the favourites lose the first, and win the second, I then get by hedging $3+10=13$, which pays.

Suppose the favourite had won the first, I then had ten shillings left out of the twelve:

there-

therefore, I should have taken fifteen to the ten that the weak side had won the second; and if so, I then got thirteen by hedging, which paid as before.

Suppose it to be three to two on the first event, and seven to four on the second, both in your favour, what are the odds against your losing them both? $\frac{3}{5}\times\frac{7}{11}=\frac{21}{55}$ · $55-21=34$ to 21, the answer.

PROOF.

On the first I lay twenty-one to fourteen, and on the second I lay thirty-five to twenty: in this I get $14+20=34$, which pays.

What are the odds against your losing both? $\frac{2}{5}\times\frac{4}{11}=\frac{8}{55}$: $55-8=47$ to 8, the answer.

PROOF.

On the first I take twelve to eight; and on the second I take thirty-five to twenty; here I get $12+35=47$, which pays.

Suppose it to be six to four on the first, and two to one on the second, both in your favour, what are the odds against your winning both? $\frac{3}{5}\times\frac{2}{3}=\frac{6}{15}$: $15-6=9$ to 6, the answer.

PROOF.

On the first I lay six to four; and on the second I lay ten to five: in this I get $4+5=9$, which pays.

What are the odds against your losing both? $\frac{2}{5}\times\frac{1}{3}=\frac{2}{15}$: $15-2=13$ to 2, the answer.

PROOF.

On the first I take three to two; and on the second I take ten to five: here I get $3+10=13$, which pays.

What are the odds against your losing the first, and winning the second? $\frac{2}{5}\times\frac{2}{3}=\frac{4}{15}$: $15-4=11$ to 4, the answer.

PROOF.

I take six to four on the first event; and on the second I lay ten to five: here I get $6+5=11$, which pays.

What are the odds against your winning the first, and losing the second? $\frac{3}{5}\times\frac{1}{3}=\frac{3}{15}$: $15-3=12$ to 3, or 4 to 1, the answer.

PROOF.

On the first event I lay three to two; and on

on the second I take ten to five: here I get $2+10=12$, which pays.

Suppose it to be three to two on the first event, and five to two on the second, what are the odds against your winning them both? $\frac{3}{5}\times\frac{5}{7}=\frac{15}{35}$: $35-15=20$ to 15, or 4 to 3, the answer.

PROOF.

On the first event I am to lay fifteen to ten; and on the second I am to lay twenty-five to ten: in this I get $10+10=20$, which pays.

What are the odds against losing both? $\frac{2}{5}\times\frac{2}{7}=\frac{4}{35}$: $35-4=31$ to 4, the answer.

PROOF.

On the first I take six to four; and on the second I take twenty-five to ten: in this I get $6+25$, which pays.

Suppose it to be three to two on the first event, and three to one on the second, both in your favour, what are the odds against your winning them both? $\frac{3}{5}\times\frac{3}{4}=\frac{9}{20}$: $20-9=11$ to 9, the answer.

PROOF.

On the first event I lay nine to six; and on the second I lay fifteen to five: here I get $6+5=11$, which pays.

What are the odds against your losing both? $\frac{2}{5}\times\frac{1}{4}=\frac{2}{20}$: $20-2=18$ to 2, or 9 to 1, the answer.

PROOF.

On the first event I take three to two; and on the second I take fifteen to five: here I get $3+15$, which pays.

Suppose there are two events, seven to four on each in your favour, what are the odds against your winning both? $\frac{7}{11}\times\frac{7}{11}=\frac{49}{121}$: $121-49=72$ to 49, the answer.

PROOF.

On the first event I lay forty-nine to twenty-eight; and on the second I lay seventy-seven to forty-four: here I get $28+44=72$, which pays.

What are the odds against your losing them both? $\frac{4}{11}\times\frac{4}{11}=\frac{16}{121}$: $121-16=105$ to 16, the answer.

PROOF.

PROOF.

On the first event I am to take 28 to 16; and on the second I take 77 to 44: here I get $28+77=105$, which pays.

What are the odds against your winning one, and losing the other?

The solution of this is to be investigated by the former algebraical method, which is, by substituting a for the strong side, and b for the weak side; and in this I will suppose a equal to 7, and b equal to 4: therefore, by squaring of $a+b$, you have $a^2+2\,a\,b+bb$; which gives $2\,a\,b$ in favour of the two events coming off; one of the strong side, and the other of the weak side; and is $=56$: $a^2+bb=65$; which is 65 to 56 against your winning one, and losing the other.

PROOF.

This must be hedged and proved in a different manner from the fractional operations; for, instead of beginning as usual with 56, which was the sum I laid the odds to, I must only begin with twelve, and to take the odds

to

to that twelve, which is twenty-one that the weak side wins the first; if it should, I then lay seventy-seven to forty-four that the strong side wins the second: if the two events come off so, I get $21+44=65$, which pays. But suppose the strong side had won the first, I then should have lost twelve out of the fifty-six, and should have but forty-four left, and to that forty-four I should have taken seventy-seven that the weak side won the second; so that if it had come off this way I should equally have gotten fifty-six by hedging: thus, $77-12=65$, which pays as before.

Suppose it to be two to oue in your favour on both events, what are the odds against your winning both? $\frac{2}{3}\times\frac{2}{3}=\frac{4}{9}$: $9-4=5$ to 4, the answer.

PROOF.

On the first event I lay four to two; and on the second I lay six to three: here I get $2+3=5$, which pays.

What are the odds against your losing both? $\frac{1}{3}\times\frac{1}{3}=\frac{1}{9}$: $9-1=8$ to 1, the answer.

PROOF.

PROOF.

On the first event I take two to one; and on the second I take six to three: here I get $6+2=8$, which pays.

What are the odds against your winning one only out of the two? $a+b$ squared, is $= a^2+2\,a\,b+b\,b$. Here a is $=2$, and b is $=1$, which reduced, is $4+4+1=9$; and shews it to be five to four that it does not come off one and one, *i. e.* by your winning one and losing the other; and is proved by hedging, thus: on the first event I take two to one that the weak side wins it; and on the second I lay six to three that the strong side wins: here I get $2+3$, which pays, if it should come off so. Suppose the strong side should have won the first, I then should have had but three left out of the hedging-money; therefore, on the second event I should have taken six to three that the weak side had won it: here I likewise get five by hedging, which pays.

Suppose it to be two to one on the first, and five to two on the second, both in your fa-

vour,

vour, what are the odds against your winning both? $\frac{2}{3} \times \frac{5}{7} = \frac{10}{21}$: $21 - 10 = 11$ to 10, the answer.

PROOF.

On the first event I lay ten to five; and on the second I lay fifteen to six: here I get $5 + 6 = 11$, which pays.

Suppose it to be two to one on the first event, and three to one on the second, both in your favour, what am I to lay you against your winning both? $\frac{2}{3} \times \frac{3}{4} = \frac{6}{12}$: $12 - 6 = 6$ to 6, the answer; which shews it to be even betting against both the favourites winning.

PROOF.

On the first event I lay six to three; and on the second I lay nine to three: here I get $3 + 3 = 6$, which pays.

What are the odds against your losing both? $\frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$: $12 - 1 = 11$ to 1, the answer.

PROOF.

On the first event I take two to one; and on the second I take nine to three: here I get $2 + 9 = 11$, which pays.

Suppose

Suppose it to be five to two on each, both in your favour, what must I bet you against your winning both? $\frac{5}{7}\times\frac{5}{7}=\frac{25}{49}$: $49-25=24$ to 25, the answer.

PROOF.

On the first I lay twenty-five to ten; and on the second I lay thirty-five to fourteen: here I get $10+14=24$, which pays.

What are the odds against your losing both? $\frac{2}{7}\times\frac{2}{7}=\frac{4}{49}$: $49-4=45$ to 4, the answer.

PROOF.

On the first I take ten to four; and on the second I take thirty-five to fourteen: here I get $10+35=45$, which pays.

What are the odds against your winning only one event out of the two?

This is answered by the square of $a+b$, as in former cases; a being equal to 5, and b equal to two, which is 29 to 20.

PROOF.

On the first I take the odds to six that the weak side wins it; and on the second I lay thirty-five to fourteen that the strong side

wins: in this form I get $15+14=29$, which pays. Suppose the strong side had won the first, I then should have had but fourteen left out of the twenty (which I call hedging-money) to which fourteen I should have taken thirty-five: here I should have gotten $35-6=29$, which pays as before.

THREE EVENTS.

Suppose you have three matches, or any three equal events, what are the odds against your winning them all? $\frac{1}{2}\times\frac{1}{2}\times\frac{1}{2}=\frac{1}{8}$: $8-1=7$ to 1, the answer.

PROOF.

On the first event I bet one guinea that you win it; on the second I bet two; and on the third I bet four: here I get $1+2+4=7$, which pays.

Suppose

Suppose it to be equal betting on the two first, and six to four on the third in your favour, what are the odds against your winning them all? $\frac{1}{2}\times\frac{1}{2}\times\frac{3}{5}=\frac{3}{20}$: $20-3=17$ to 3, the answer.

PROOF.

On the first I bet 3; on the second I bet 6; and on the third I lay 12 to 8: here I get $3+6+8=17$, which pays.

What are the odds against your winning the two first, and losing the third, or losing them all, which is equally the same?
$\frac{1}{2}\times\frac{1}{2}\times\frac{2}{5}=\frac{2}{20}$: $20-2=18$ to 2, or 9 to 1, the answer.

PROOF.

On the first event I shall bet one (supposing I had laid nine to one); on the second I bet two; and on the third I take six to four: here I get $1+2+6=9$, which pays.

Suppose it to be equal betting on the first, five to four on the second, and six to four on the third, all in your favour, what are the odds against your winning them all?

$\frac{1}{2} \times \frac{5}{9} \times \frac{3}{5} = \frac{15}{90}$: $90 - 15 = 75$ to 15, or 5 to 1, the answer.

PROOF.

On the first event I bet fifteen; on the second I lay thirty to twenty-four; and on the third I lay fifty-four to thirty-six: here I get $15 + 24 + 36 = 75$, which pays.

What are the odds against your losing them all?

$\frac{1}{2} \times \frac{4}{9} \times \frac{2}{5} = \frac{8}{90}$: $90 - 8 = 82$ to 8, the answer.

PROOF.

On the first event I bet eight; on the second I take twenty to sixteen; and on the third I take fifty-four to thirty-six: here I get $8 + 20 + 54 = 82$, which pays.

What are the odds against your winning the two first, and losing the third?

$\frac{1}{2} \times \frac{5}{9} \times \frac{2}{5} = \frac{10}{90}$: $90 - 10 = 80$ to 10, or 8 to 1, the answer.

PROOF.

On the first event I bet ten; on the second I lay twenty to sixteen; and on the third I take

take fifty-four to thirty-six: here I get $10+16+54=80$, which pays.

Suppose it to be six to four on the first, two to one on the second, and five to two on the third, all in your favour, what are the odds against your winning the three?
$\frac{3}{5}\times\frac{2}{3}\times\frac{5}{7}=\frac{30}{105}$: $105-30=75$ to 30, the answer.

PROOF.

On the first event I lay thirty to twenty; on the second I lay fifty to twenty-five; and on the third I lay seventy-five to thirty: here I get $20+25+30=75$, which pays.

What are the odds against your losing them all? $\frac{2}{5}\times\frac{1}{3}\times\frac{2}{7}=\frac{4}{105}$: $105-4=101$ to 4, the answer.

PROOF.

On the first event I take six to four; on the second I take twenty to ten; and on the third I take seventy-five to thirty: here I get $6+20+75=101$, which pays.

What are the odds against your winning the first, and losing the second and third?
$\frac{3}{5}\times\frac{1}{3}\times\frac{2}{7}=\frac{6}{105}$: $105-6=99$ to 6, the answer.

PROOF.

PROOF.

On the first event I lay six to four; on the second I take twenty to ten; and on the third I take seventy-five to thirty: here I get $4+20+75=99$, which pays.

What are the odds against your winning the first and second, and losing the third? $\frac{3}{5}\times\frac{2}{3}\times\frac{2}{7}=\frac{12}{105}$: $105-12=93$ to 12, the answer.

PROOF.

On the first event I lay twelve to eight; on the second I lay twenty to ten; and on the third I take seventy-five to thirty: here I get $8+10+75=93$, which pays.

Suppose it to be two to one in your favour on each event, what are the odds against your winning the three events? $\frac{2}{3}\times\frac{2}{3}\times\frac{2}{3}=\frac{8}{27}$: $27-8=19$ to 8, the answer.

PROOF.

On the first event I lay eight to four; on the second I lay twelve to six; and on the third I lay eighteen to nine: here I get $4+6+9=19$, which pays.

What are the odds against your losing all? $\frac{1}{3}\times\frac{1}{3}\times\frac{1}{3}=\frac{1}{27}$: $27-1=26$ to 1, the answer.

PROOF.

PROOF.

On the first event I take two to one; on the second I take six to three; and on the third I take eighteen to nine: here I get $2+6+18=26$, which pays.

What are the odds against your winning any assigned two, and losing the other? $\frac{2}{3}\times\frac{2}{3}\times\frac{1}{3}=\frac{4}{27}$: $27-4=23$ to 4, the answer.

PROOF.

On the first event I bet four to two; on the second I bet six to three; and on the third I take eighteen to nine: here I get $2+3+18=23$, which pays.

What are the odds against any assigned one winning, and losing the other two? $\frac{2}{3}\times\frac{1}{3}\times\frac{1}{3}=\frac{2}{27}$: $27-2=25$ to 2, the answer.

PROOF.

On the first event I lay two to one; on the second I take six to three; and on the third I take eighteen to nine: here I get $1+6+18=25$, which pays.

What are the odds against the strong side winning two only out of the three?

For

For the solution of this $a+b$ must be cubed or raised to the third power, making $a=2$, and $b=1$, which will stand thus, $a^3+3a^2b+3ab^2+b^3$; and shews it to be fifteen to twelve, or five to four, the answer.

PROOF.

The first is to remain neuter, and if the favourite or strong side should win it, I am then to take six to three that the weak side wins the second; if it does, it will then be one and one; and if the strong side should win the third, I lose my bet of fifteen to twelve: therefore, to guard against that, as I have now in hand, including the twelve hedging-money, and the six that I won on the second event, eighteen, which I am to lay to nine, on the strong side; and if the strong side wins it, I then get $6+9=15$, which pays the 15 to 12.

Suppose the strong side had lost the first, I then should have laid twelve to six that the strong side won the second; if he had, it then would be one and one; therefore I am to back the strong side on the third event, by laying eighteen

eighteen to nine; if he wins that, I then lose my fifteen to twelve; and get by hedging $6+9=15$, as before.

Suppose the strong side had won the first and second events, I should have nine left out of the hedging-money; to which nine I should have taken eighteen; and if the weak side had won the third, I should have gotten by hedging $18-3=15$, which would have paid, as before.

You are to observe, that there are three different forms for each side to come off two and one only, as appears by the cube or third power of $a\ b$, and shall lay each form down in a more conspicuous and concise manner, wherein I shall substitute the letter S. for the strong side, and W. for the weak side; and shall continue to do so in all parallel cases.

To give the proof to these algebraical solutions more conspicuously, I have set down the hedging money in hand on each event, either by adding to, or taking from, as the event comes off.

THE FIRST FORM.

Supposing I had laid five to four;

On the first event I stand neuter; 4 S. wins.

On the second ditto I take 2 to 1; 3 S. wins.
On the third ditto I take 6 to 3; 9 W. wins.

In this I get $6-1=5$, which pays.

THE SECOND.

On the first I stand neuter; 4 S. wins.
On the second I take 2 to 1; 6 W. wins.
On the third I lay 6 to 3; 9 S. wins.

In this I get $2+3=5$.

THE THIRD.

On the first I stand neuter; 4 W. wins.
On the second I lay 4 to 2; 6 S. wins.
On the third I lay 6 to 3; 9 S. wins.

In this I get $2+3=5$.

What are the odds against the weak side winning two events only?

This is answered by the former cube of $a+b$; wherein you have $3\ a\ b^2$: being all the chances for the weak side coming off two and one, *i. e.* winning two only: $3\ a\ b^2$. reduced, is $=6$, which taken from 27, the whole cube, there will be 21 left; which shews the answer to be 21 to 6.

THE PROOF IN EACH FORM.

FIRST FORM.

On the first event I take 6 to 3;	12 W. wins.
On the second I take 6 to 3;	18 W. wins.
On the third I lay 18 to 9;	27 S. wins.

In this form I get $6+6+9=21$: which pays.

THE SECOND.

On the first event I take 6 to 3;	12 W. wins.
On the second I take 6 to 3;	9 S. wins.
On the third I take 18 to 9;	27 W. wins.

In this form I get $6+18-3=21$.

THIRD FORM.

On the first event I take 6 to 3;	3 S. wins.
On the second I take 6 to 3;	9 W. wins.
On the third I take 18 to 9;	27 W. wins.

In this form I get $6+18-3=21$, as before.

Suppose you have three events, two to one on the first; five to two on the second; and three to one on the third, all in your favour; what are the odds against your winning them all? $\frac{2}{3}\times\frac{5}{7}\times\frac{3}{4}=\frac{30}{84}$: $84-30=54$ to 30, the answer.

PROOF.

On the first event I lay thirty to fifteen; on the second I lay forty-five to eighteen; and on the third I lay sixty-three to twenty-one: here I get $15+18+21=54$, which pays.

What are the odds against your losing the three events?

$\frac{1}{3}\times\frac{2}{7}\times\frac{1}{4}=\frac{2}{84}$: $84-2=82$ to 2, or 41 to 1, the answer.

PROOF.

On the first event I take four to two; on the second I take fifteen to six; and on the third I take sixty-three to twenty-one: here I get $4+15+63=82$, which pays.

What are the odds against your losing the first, and winning the second and third?

$\frac{1}{3}\times\frac{5}{7}\times\frac{3}{4}=\frac{15}{84}$: $84-15=69$ to 15, the answer.

PROOF.

On the first event I take thirty to fifteen; on the second I lay forty-five to eighteen; and on the third I lay sixty-three to twenty-one: here I get $30+18+21=69$, which pays.

What

What are the odds against your winning the first and third, and losing the second?
$\frac{2}{3}\times\frac{2}{7}\times\frac{3}{4}=\frac{12}{84}$: $84-12=72$ to 12, or 6 to 1, the answer.

PROOF.

On the first event I lay twelve to six; on the second I take forty-five to eighteen; and on the third I lay sixty-three to twenty-one: here I get $6+45+21=72$, which pays.

What are the odds against your losing the first and third, and winning the second?
$\frac{1}{3}\times\frac{5}{7}\times\frac{1}{4}=\frac{5}{84}$: $84-5=79$ to 5, the answer.

PROOF.

On the first event I take ten to five; on the second I lay fifteen to six; and on the third I take sixty-three to twenty-one: here I get $10+6+63=79$, which pays.

Suppose it to be two to one on the first event, and three to one on the second and third all in your favour, what are the odds against your winning the three events?
$\frac{2}{3}\times\frac{3}{4}\times\frac{3}{4}=\frac{18}{48}$: $48-18=30$ to 18, or 5 to 3, the answer.

PROOF.

PROOF.

On the first event I lay eighteen to nine; on the second I lay twenty-seven to nine; and on the third I lay thirty-six to twelve: here I get $9+9+12=30$, which pays.

What are the odds against your losing them all? $\frac{1}{3}\times\frac{1}{4}\times\frac{1}{4}=\frac{1}{48}$: $48-1=47$ to 1, the answer.

PROOF.

On the first event I take two to one; on the second I take nine to three; and on the third I take thirty-six to twelve: here I get $2+9+36=47$, which pays.

What are the odds against your winning the first, and losing the second and third? $\frac{2}{3}\times\frac{1}{4}\times\frac{1}{4}=\frac{2}{48}$: $48-2=46$ to 2, or 23 to 1, the answer.

PROOF.

On the first event I lay two to one; on the second I take nine to three; and on the third I take thirty-six to twelve: here I get $1+9+36=46$, which pays.

Suppose it to be five to two on the first and second,

second, and three to one on the third, all in your favour, what are the odds against your winning the three events? $\frac{5}{7}\times\frac{5}{7}\times\frac{3}{4}=\frac{75}{196}$: $196-75=121$ to 75, the answer.

PROOF.

On the first event I lay seventy-five to thirty; on the second I lay one hundred and five to forty-two; and on the third I lay one hundred and forty-seven to forty-nine: here I get $30+42+49=121$, which pays.

What are the odds against your losing them all? $\frac{2}{7}\times\frac{2}{7}\times\frac{1}{4}=\frac{4}{196}$: $196-4=192$ to 4, or 48 to 1, the answer.

PROOF.

On the first event I take ten to four; on the second I take thirty-five to fourteen; and on the third I take one hundred and forty-seven to forty-nine: in this I get $10+35+147=192$, which pays.

Suppose it to be three to one on each in your favour, what are the odds against your winning the three? $\frac{3}{4}\times\frac{3}{4}\times\frac{3}{4}=\frac{27}{64}$: $64-27=37$ to 27, the answer.

PROOF.

PROOF.

On the first event I lay twenty-seven to nine; on the second I lay thirty-six to twelve; and on the third I lay forty-eight to sixteen: here I get $9+12+16=37$, which pays.

What are the odds against your losing them all? $\frac{1}{4}\times\frac{1}{4}\times\frac{1}{4}=\frac{1}{64}$: $64-1=63$ to 1, the answer.

PROOF.

On the first event I take three to one; on the second I take twelve to four; and on the third I take forty-eight to sixteen: in this I get $3+12+48=63$, which pays.

What are the odds against your winning any assigned event, and losing the other two? $\frac{1}{4}\times\frac{3}{4}\times\frac{1}{4}=\frac{3}{64}$: $64-3=61$ to 3, the answer.

PROOF.

On the first event I take nine to three; on the second I lay twelve to four; and on the third I take forty-eight to sixteen: in this I get $9+4+48=61$, which pays.

What are the odds against your winning any assigned two, and losing the other? $\frac{3}{4}\times\frac{3}{4}\times\frac{1}{4}=\frac{9}{64}$: $64-9=55$ to 9, the answer.

PROOF.

PROOF.

On the first event I lay nine to three; on the second I lay twelve to four; and on the third I take forty-eight to sixteen: here I get $3+4+48=55$, which pays.

What are the odds against the strong side winning two events only out of the three?

The solution of this is investigated by the third power of $a+b$, making $a=3$, and $b=1$; and the answer is 37 to 27, which is proved in the three following different changes or forms.

FIRST FORM.

On the first event I take 9 to 3;	36 W. wins.
On the second I lay 36 to 12;	48 S. wins.
On the third I lay 48 to 16;	64 S. wins.

In this form I get $9+12+16=37$, which pays.

SECOND.

On the first I take 9 to 3;	24 S. wins.
On the second I take 24 to 8;	48 W. wins.
On the third I lay 48 to 16;	64 S. wins.

In this form I get $24+16-3=37$, which pays as before.

THIRD.

On the first I take 9 to 3;	24 S. wins.
On the second I take 24 to 8;	16 S. wins.
On the third I take 48 to 16;	64 W. wins.

In this form I get $48-8-3=37$, which pays as before.

What are the odds against the weak side winning two only?

The answer is 55 to 9, which is the same as you had against your winning any assigned two, and losing the other.

FIRST FORM.

On the first event I take 15 to 5;	24 W. wins.
On the second I take 24 to 8;	48 W. wins.
On the third I lay 48 to 16;	64 S. wins.

In this form I get $15+24+16=55$, which pays.

SECOND.

On the first I take 15 to 5;	24 W. wins.
On the second I take 24 to 8;	16 S. wins.
On the third I take 48 to 16;	64 W. wins.

In this form I get $15+48-8=55$, which pays.

THIRD.

On the first event I take 15 to 5; 4 S. wins.
On the second I take 12 to 4; 16 W. wins.
On the third I take 48 to 16 64 W. wins.

In this form I get $12+48-5=55$, which pays.

FOUR EVENTS.

SUPPOSE you have four events, even betting on each, what are the odds against your winning them all? $\frac{1}{2}\times\frac{1}{2}\times\frac{1}{2}\times\frac{1}{2}=\frac{1}{16}$: $16-1=15$ to 1, the answer.

PROOF.

On the first event I bet one guinea; on the second I bet two; on the third I bet four; and on the fourth I bet eight: here I get $1+2+4+8=15$, which pays.

What are the odds against your winning three events only, out of the four?

The solution of this is taken from the quadratic, or fourth power of $a+b$; supposing

$a=1$, and $b=1$, which stands thus; $a^4+4a^3b+6a^2b^2+4ab^3+b^4$: out of this power you have but $4a^3b$ in your favour; and reduced into figures is four, being the number of chances for you out of sixteen, the sum of the whole power; which makes it twelve to four, or three to one, against you.

In this there are four changes.

THE FIRST CHANGE.

On the first event I bet 2 for you; 6 you win.
On the second I bet two for you; 8 you win.
On the third neuter; 8 you win.
On the fourth I bet 8 against you; 16 you lose.

In this I get $2+2+8=12$, which pays.

SECOND CHANGE.

On the first event I bet 2 for you; 6 you win.
On the second I bet 2 for you; 8 you win.
On the third neuter: 8 you lose.
On the fourth I bet 8 for you; 16 you win.

In this I get $2+2+8=12$, as before.

THIRD CHANGE.

On the first event I bet 2 for you; 6 you win.

On

On the second I bet 2 for you; 4 you lose.
On the third I bet 4 for you; 8 you win.
On the fourth I bet 8 for you; 16 you win.

In this I get $2+4+8-2=12$, as before.

FOURTH CHANGE.

On the first event I bet 2 for you; 2 you lose.
On the second I bet 2 for you; 4 you win.
On the third I bet 4 for you; 8 you win.
On the fourth I bet 8 for you; 16 you win.

In this I get $2+4+8-2=12$, as before.

What are the odds against your winning two only out of the four events, or their coming off two and two?

The solution of this is likewise given by the fourth power of $a+b$, in which you have only $6a^2b^2$ in your favour; and reduced is 6, which is 10 to 6, or 5 to 3 against you, the answer; which admits of six changes in the proof.

THE FIRST CHANGE.

On the first event I stand neuter; 6 you win.
On the second I bet 2 against you; 4 you win.
On the third I bet 4 against you; 8 you lose.
On the fourth I bet 8 against you; 16 you lose.

In this I get $4+8-2=10$, which pays.

SECOND

SECOND CHANGE.

On the first event neuter;	6 you win.
On the second I bet 2 against you;	8 you lose.
On the third neuter;	8 you lose.
On the fourth I bet 8 for you;	16 you win.

In this form I get $2+8=10$, which pays.

THIRD CHANGE.

On the first event neuter;	6 you win.
On the second I bet 2 against you;	8 you lose.
On the third neuter;	8 you win.
On the fourth I bet 8 against you;	16 you lose.

In this change I get $2+8=10$, which pays.

FOURTH CHANGE.

On the first event neuter;	6 you lose.
On the second I bet 2 for you;	4 you lose.
On the third I bet 4 for you;	8 you win.
On the fourth I bet 8 for you;	16 you win.

In this I get $4+8-2=10$, which pays.

FIFTH CHANGE.

On the first event neuter;	6 you lose.
On the second I bet 2 for you;	8 you win.
On the third neuter;	8 you win.

On

On the fourth I bet 8 against you; 16 you lose.

In this I get $2+8=10$, which pays.

SIXTH CHANGE.

On the first event neuter;	6 you lose.
On the second I bet 2 for you;	8 you win.
On the third neuter;	8 you lose.
On the fourth I bet 8 for you;	16 you win.

In this I get $2+8=10$, which pays.

Suppose that in four events it is even betting on the first, three to two on the second, five to four on the third, and seven to four on the fourth, all in your favour, what are the odds against your winning all the four? $\frac{1}{2}\times\frac{3}{5}\times\frac{5}{9}\times\frac{7}{11}=\frac{105}{990}$: $990-105=885$ to 105, the answer.

PROOF.

On the first event I bet one hundred and five; on the second I lay two hundred and ten to one hundred and forty; on the third I lay three hundred and fifty to two hundred and eighty; and on the fourth I lay six hundred and thirty to three hundred and sixty: here I get $105+140+280+360=885$, which pays.

What are the odds against your losing all the

the four? $\frac{1}{2}\times\frac{2}{5}\times\frac{4}{9}\times\frac{4}{11}=\frac{32}{990}$: $990-32=958$ to 32, the answer.

PROOF.

On the first event I bet thirty-two: on the second I take ninety six to sixty-four; on the third I take two hundred to one hundred and sixty; and on the fourth I take six hundred and thirty to three hundred and sixty: here I get $32+96+200+630=958$, which pays.

What are the odds against your winning the three first, and losing the fourth? $\frac{1}{2}\times\frac{3}{5}\times\frac{5}{9}\times\frac{4}{11}=\frac{60}{990}$: $990-60=930$ to 60, the answer.

PROOF.

On the first event I bet sixty; on the second I lay one hundred and twenty to eighty; on the third I lay two hundred to one hundred and sixty; and on the fourth I take six hundred and thirty to three hundred and sixty: here I get $60+80+160+630=930$, which pays.

What are the odds against your winning the first and second, and losing the third and fourth? $\frac{1}{2}\times\frac{3}{5}\times\frac{4}{9}\times\frac{4}{11}=\frac{48}{990}$: $990-48=942$ to 48, the answer.

PROOF.

PROOF.

On the first event I bet forty-eight; on the second I lay ninety-six to sixty-four; on the third I take two hundred to one hundred and sixty; and on the fourth I take six hundred and thirty to three hundred and sixty: here I get $48+64+200+630=942$, which pays.

Suppose in four events you have three to two in your favour on each, what are the odds against your winning them all? $\frac{3}{5}\times\frac{3}{5}\times\frac{3}{5}\times\frac{3}{5}=\frac{81}{625}$: $625-81=544$ to 81, the answer.

PROOF.

On the first event I lay eighty-one to fifty-four; on the second I lay one hundred and thirty-five to ninety; on the third I lay two hundred and twenty-five to one hundred and fifty; and on the fourth I lay three hundred and seventy-five to two hundred and fifty: here I get $54+90+150+250=544$, which pays.

What are the odds against your losing them all? $\frac{2}{5}\times\frac{2}{5}\times\frac{2}{5}\times\frac{2}{5}=\frac{16}{625}$: $625-16=609$ to 16, the answer.

PROOF.

On the first event I take twenty-four to sixteen; on the second I take sixty to forty; on the third I take one hundred and fifty to one hundred; and on the fourth I take three hundred and seventy-five to two hundred and fifty: here I get $24+60+150+375=609$, which pays.

What are the odds against your winning four successive events, where it is two to one in your favour on each? $\frac{2}{3}\times\frac{2}{3}\times\frac{2}{3}\times\frac{2}{3}=\frac{16}{81}$: $81-16=65$ to 16, the answer; which is $\frac{1}{16}$ better than 4 to 1.

PROOF.

On the first event I lay sixteen to eight; on the second I lay twenty-four to twelve; on the third I lay thirty-six to eighteen; and on the fourth I lay fifty-four to twenty-seven: here I get $8+12+18+27=65$, which pays.

What are the odds against your losing the four? $\frac{1}{3}\times\frac{1}{3}\times\frac{1}{3}\times\frac{1}{3}=\frac{1}{81}$: $81-1=80$ to 1, the answer.

PROOF.

On the first event I take two to one; on the second

second I take six to three; on the third I take eighteen to nine; and on the fourth I take fifty-four to twenty-seven: here I get $2+6+18+54=80$, which pays.

What are the odds against your winning two only out of the four?

The answer to this is taken or investigated from the fourth power of $a+b$, wherein a is made equal to 2, and b equal to 1, which is 57 to 24 against you.

There are six different changes or forms for this to come off in your favour.

PROOF IN THE FIRST FORM.

On the first event I take 12 to 6; 18 you win.
On the second I take 18 to 9; 9 you win.
On the third I take 18 to 9; 27 you lose.
On the fourth I take 54 to 27; 81 you lose.

In this I get $18+54-6-9=57$, which pays.

IN THE SECOND.

On the first event I take 12 to 6; 18 you win.
On the second I take 18 to 9; 36 you lose.
On the third I take 18 to 9; 54 you lose.
On the fourth I lay 54 to 27; 81 you win.

In this form I get $18+18+27-6=57$, which pays.

IN THE THIRD.

On the first event I take 12 to 6; 18 you win.
On the second I take 18 to 9; 36 you lose.
On the third I take 18 to 9; 27 you win.
On the fourth I take 54 to 27; 81 you lose.

In this I get $18+54-6-9=57$, which pays.

IN THE FOURTH.

On the first event I take 12 to 6; 36 you lose.
On the second I stand neuter; 36 you lose.
On the third I lay 36 to 18; 54 you win.
On the fourth I lay 54 to 27; 81 you win.

In this I get $12+18+27=57$, which pays.

IN THE FIFTH.

On the first event I take 12 to 6; 36 you lose.
On the second I stand neuter; 36 you win.
On the third I take 18 to 9; 27 you win.
On the fourth I take 54 to 27; 81 you lose.

In this I get $12+54-9=57$, which pays.

IN THE SIXTH.

On the first event I take 12 to 6; 36 you lose.
On the second I stand neuter; 36 you win.
On the third I take 18 to 9; 54 you lose.
On the fourth I lay 54 to 27; 81 you win.

In this I get $12+18+27=57$, which pays.

What are the odds against your winning three events only out of the four, it being two to one in your favour?

The solution of this is found by raising $a+b$, to the fourth power as before; and is 49 to 32 against you, and admits of no more than four changes or forms.

IN THE FIRST FORM.

On the first event I lay 8 to 4; 36 you win.
On the second I stand neuter; 36 you win.
On the third I take 18 to 9; 27 you win.
On the fourth I take 54 to 27; 81 you lose.

In this form I get $4+54-9=49$, which pays.

IN THE SECOND.

On the first event I lay 8 to 4; 36 you win.
On the second neuter; 36 you win.

On

On the third I take 18 to 9; 54 you lose.
On the fourth I lay 54 to 27; 81 you win.

In this form I get $4+18+27=49$, which pays.

IN THE THIRD.

On the first event I lay 8 to 4; 36 you win.
On the second neuter; 36 you lose.
On the third I lay 36 to 18; 54 you win.
On the fourth I lay 54 to 27; 81 you win.

In this form I get $4+18+27=49$, which pays.

IN THE FOURTH.

On the first event I lay 8 to 4; 24 you lose.
On the second I lay 24 to 12; 36 you win.
On the third I lay 36 to 18; 54 you win.
On the fourth I lay 54 to 27; 81 you win.

In this form I get $12+18+27-8=49$, which pays.

What are the odds against your losing three only out of the four?

The answer to this is found in the same power as the former, and is 73 to 8; and admits of four changes or forms.

PROOF.

PROOF IN THE FIRST FORM.

On the first event I take 10 to 5;	3 you win.
On the second I take 6 to 3;	9 you lose.
On the third I take 18 to 9;	27 you lose.
On the fourth I take 54 to 27;	81 you lose.

In this form I get $6+18+54-5=73$, which pays.

IN THE SECOND.

On the first event I take 10 to 5;	18 you lose.
On the second I take 18 to 9;	36 you lose.
On the third I take 18 to 9;	27 you win.
On the fourth I take 54 to 27;	81 you lose.

In this form I get $10+18+54-9=73$, which pays.

IN THE THIRD.

On the first event I take 10 to 5;	18 you lose.
On the second I take 18 to 9;	9 you win.
On the third I take 18 to 9;	27 you lose.
On the fourth I take 54 to 27;	81 you lose.

In this form I get $10+18+54-9=73$, which pays.

IN THE FOURTH.

On the first event I take 10 to 5;	18 you lose.
On the second I take 18 to 9;	36 you lose.

On

On the third I take 18 to 9; 54 you lose.
On the fourth I lay 54 to 27; 81 you win.

In this form I get $10+18+18+27=73$, which pays.

It may be thought unnecessary to give any more cases, or any more events than four; for by a due attention to the instructions already laid down, you may go to any number of events.

INSTRUCTIONS,

How to lay your money round against any field, so as to be neither a winner nor a loser; and when capable of doing so, you may lay your bets to advantage as they offer.

Suppose there is a field of three horses, and that they are equal favourites; consequently the odds are two to one against each horse, viz.

20 to 10 against A.
20 to 10 against B.
20 to 10 against C.

In

In this example you see that the aggregate sum against each horse is equal to thirty; and let which will win, he that lays against each, or as the technical term is, he that lays his money round, neither wins nor loses.

Suppose you meet with a gentleman who may take six to four; you must then be particular in the sum which you are to lay the odds to, so that the sum of your money and his may correspond with the aggregate sum thirty: therefore, let the money which you are to lay the odds to, be twelve, and to that you are to lay eighteen; which agrees with the aggregate sum. In this case you will be sure to be a gainer of two guineas, let which will win: as appears in the following example:—

18 to 12 against A,
20 to 10 against B,
20 to 10 against C.

If A wins, you receive $10+10=20$, to pay 18.

If B wins, you receive $12+10=22$, to pay 20.

If C wins, you receive $12+10=22$, to pay 20.

On a field of three horses, viz. A, B, and C, even betting against A, two to one against B, what are the odds against C, and to lay your money round, so as neither to win nor lose?

15 to 15 against A,
20 to 10 against B, 30 is the aggregate sum.
25 to 5 against C, the answer; which is five to one, and is found by the sum which you lay the odds to of B and C agreeing or corresponding with the money laid against the favourite A; fifteen being the sum laid against A, and ten the money which you laid the odds to against B, consequently there is five wanting to make it equal to fifteen: five being the sum which you are to lay the odds to against C, that odds must be twenty-five, to make it equal to thirty, the aggregate sum.

There is another method of finding the odds against C, which is, by addition of vulgar fractions, thus, $\overset{A,}{\frac{1}{2}}+\overset{B,}{\frac{1}{3}}=\frac{5}{6}$: $6-5=5$ to 1 against C, as before.

A due attention given to the two former cases, and clearly understood, will enable you to lay your money to the best advantage against any

any field whatsoever: notwithstanding which, I will give you a few more examples.

On a field of three horses, viz. A, B, and C, five to four on A, and two to one against B, what are the odds against C?

$$\left.\begin{array}{l}\text{40 to 50 against A,}\\ \text{60 to 30 against B,}\end{array}\right\}\text{ 90 the aggregate sum.}$$

80 to 10 against C, or 8 to 1, the answer.

If A wins, I lose 40, and get $30+10=40$, against B and C.

If B wins, I lose 60, and get $50+10=60$, against A and C.

If C wins, I lose 80, and get $50+30=80$, against A and B.

On a field of four horses, where it is six to four against A, two to one against B, and four to one against C, what are the odds against D?

$$\left.\begin{array}{l}\text{90 to 60 against A,}\\ \text{100 to 50 against B,}\\ \text{120 to 30 against C,}\end{array}\right\}\text{ 150 the aggregate sum.}$$

140 to 10 against D, or 14 to 1, the answer.

On a field of five horses, where it is two to one against A, three to one against B, four to one against C, and five to one against D, what are the odds against E?

$$\left.\begin{array}{l}\text{200 to 100 against A,}\\ \text{225 to 75 against B,}\\ \text{240 to 60 against C,}\\ \text{250 to 50 against D,}\end{array}\right\}\text{300 the aggregate sum.}$$

285 to 15 against E, or 19 to 1, the answer.

On a field of six horses, where it is five to two against the favourite A, four to one against B, four to one against C, six to one against D, and nine to one against E, what are the odds against F?

$$\left.\begin{array}{l}\text{250 to 100 against A,}\\ \text{280 to 70 against B,}\\ \text{280 to 70 against C,}\\ \text{300 to 50 against D,}\\ \text{315 to 35 against E,}\end{array}\right\}\text{350 the aggregate sum.}$$

325 to 25 against F, 13 to 1, the answer.

On a field of seven horses, where it is three to one against A, three to one against B, four to one against C, five to one against D, eleven to one against E, twenty-nine to one against F, what are the odds against G?

$$\left.\begin{array}{l}\text{450 to 150 against A,}\\ \text{450 to 150 against B,}\\ \text{480 to 120 against C,}\\ \text{500 to 100 against D,}\\ \text{550 to 50 against E,}\\ \text{580 to 20 against F,}\end{array}\right\}\text{600 the aggregate sum.}$$

590 to 10 against G, 59 to 1, the answer.

On

On a field of nine horses, where it is three to one against A, four to one against B, seven one-eighth to one against C, nine to one against D, what are your different sums to all the rest, so as to be a gainer of ten guineas, let which will win?

195 to 65 against A,
208 to 52 against B,
228 to 32 against C,
234 to 26 against D,
236 to 24 against E,
238 to 22 against F,
240 to 20 against G,
242 to 18 against H,
249 to 11 against I,

260 the aggregate sum.

In this you are gainer of ten guineas, let which will win.

On the same field, so as to be neither a winner nor a loser, an accurate answer is required.

195 to 65 against A,
208 to 52 against B,
228 to 32 against C,
234 to 26 against D,
236 to 24 against E,
240 to 20 against F,
242 to 18 against G,
245 to 15 against H,

260 the aggregate sum.

252 to 8 against I, the answer required.

A due

A due observance of these two last tables, with the rules already given, will be a sufficient government for you to lay your money to the best advantage.

It often happens, that on a large field you cannot lay against more than two or three horses; and in these cases you are obliged to stand your money: however, I have sought out a method to get over that, which is, by backing these against the field which you have already laid against. Suppose on a field of six, seven, or more horses, that you had laid fifty to twenty against the favourite A, sixty to ten against B, and that you could not lay against any more; in this situation how are you to bet upon A and B against all the rest? Suppose this field was to run for a purse of seventy guineas, A would be entitled to $\frac{2}{7}$ of it, and B to $\frac{1}{7}$; so that A and B would be entitled to $20+10=30$ of the 70 guineas: therefore, it is forty on the field to thirty against A and B. So that to secure yourself, you are to lay thirty to forty A and B against the field. Suppose A wins, you lose fifty; and to pay that fifty, you get ten against B, and forty on A and B against the field. Suppose B wins,

wins, you lose sixty; and to pay that, you get twenty against A, and forty against the field. Suppose neither A nor B had won, you would then have lost thirty against the field; and to pay that, you won twenty against A, and ten against B.

If the reader is not already acquainted with vulgar fractions, and has an inclination to avail himself of this and the following theorem, I here lay down the proper method of finding the odds of A, B, and the field, $\frac{2}{7}+\frac{1}{7}=14+7$ $=\frac{21}{49}$: $49-21=28$, which shews it to be twenty-eight to twenty-one, or reduced, is four to three on the field against A and B.

As it is necessary that you should be well versed in the addition of vulgar fractions, I will here give you a small sketch. In addition, you are first to reduce the numerators into a new numerator, by multiplying each numerator into every denominator but its own, for a new numerator, and all the denominators together for a common denominator; then add all the numerators together for a joint numerator; as you will see hereafter, and has already been done in this case, on two events only, where A and B's share were

were concerned in the purse of seventy guineas: however, if you find that these instructions are not sufficient, I would recommend you to Dilworth's Arithmetic, or any other book in which vulgar fractions are elucidated.

On a field where you have laid two to one against A, and four to one against B, what are the odds between A, B, and the field? $\frac{1}{3}+\frac{1}{5}=\frac{5+3}{15}=8$, the answer, which is 8 to 7 on A and B, against the field, and is proved as under:

40 to 20 against A, }
48 to 12 against B, } 60 the aggregate sum.

32 to 28 on A, B, against the field, the answer, as before: which may be likewise found by adding a sum to twelve, the (money laid against B) which will make it equal to forty, (that being the sum laid against A) which is twenty-eight; and to find what you are to lay against the twenty-eight, is found by adding the sum thirty-two to it, which makes sixty, the aggregate sum.

On

On a field where you laid two to one against A, five to one against B, and seven to one against D, what are the odds between A, B, C, and the field? $\frac{1}{3}+\frac{1}{6}+\frac{1}{8}=\frac{48+24+18=90}{144}$: the answer is 90 to 54, on A, B, C, against the field; and is proved in the following table, where the answer is equally found.

$$\left.\begin{array}{l}\text{96 to 48 against A,}\\ \text{120 to 24 against B,}\\ \text{126 to 18 against C,}\end{array}\right\}\text{144 the aggregate sum,}$$

90 to 54 on A, B, C, against the field, as before.

Suppose you could have laid eighty-four to sixty against the field, you would then be a gainer of six, let which would have won.

On a field where it is three to one against A, four to one against B, six to one against C, and six to one against D, what are the odds between them and the field? $\frac{1}{4}+\frac{1}{5}+\frac{1}{7}+\frac{1}{7}=\frac{245+196+140+140}{980}=721$ to 259 the answer.

$$\left.\begin{array}{l}\text{735 to 245 against A,}\\ \text{784 to 196 against B,}\\ \text{840 to 140 against C,}\\ \text{840 to 140 against D,}\end{array}\right\}\text{980 the aggregate sum,}$$

721 to 259 agst the field, or $2\frac{203}{259}$ to 1, the proof.

 There

There is a case which I have often seen, though I never saw the accurate odds laid; and that is, the odds between two neither win no bet.

I here lay down the method of finding the exact odds, with instructions how to hedge to the same, which stands as a proof to the fractional operation.

BETWEEN TWO IN A FIELD.

Suppose in a field where it is two to one against A, and five to two against B, what are the odds between the two neither win no bet; the odds between them two and the field; likewise how to hedge to the different bets, so as to neither win nor lose?

$\frac{1}{3}+\frac{2}{7}=\frac{7+6=13;}{21}$ the two new numerators shew it to be 7 to 6 in favour of A against B, and the addition shews it to be 13 to 8 A, B, against the field.

7 to 6 on A, against B, neither win.

13 to 8 on A, B, against the field.

18 to

18 to 9 against A.

10 to 4 against B.

In this table the foregoing two solutions are proved; for, if A should win, you lose 18 to 9 against him, and win $6+8+4=18$, which pays: if B should win, you lose $7+10=17$, and win $8+9=17$, which pays: if the field should win, you lose 13, and win $9+4=13$, which pays. You are to observe that the sum of the different sums which you lay against A and B, is equal to the money which you laid against the field; for if neither A nor B should win, the money which you win against them pays the field, the bet between A and B then being void.

Suppose it to be two to one against A, and three to one against B, what are the different odds, as before?

$\frac{1}{3}+\frac{1}{4}=\frac{4+3=7}{12}$: the odds on A against B, 4 to 3, and are 7 to 5 on A, B, against the field.

PROOF.

4 to 3 on A, against B, neither win.

7 to 5 on A, B, against the field.

10 to 5 against A.

6 to 2 against B.

PROOF EXPLAINED.

If A should win, you lose 10, and win $3+5+2=10$.

If B should win, you lose $6+4=10$, and win $5+5=10$.

If the field should win, you lose 7, and win $5+2=7$.

Suppose it to be two to one against A, and four to one against B, what are the odds between the two, neither win; likewise the odds between them and the field?

$\frac{1}{3}+\frac{1}{5}=\frac{5+3=8}{15}$: the odds on A against B are 5 to 3, and 8 to 7 on A, B, against the field.

5 to 3 on A, against B, neither win.

8 to 7 on A, B, against the field.

12 to 6 against A.

8 to 2 against B.

PROOF EXPLAINED.

If A wins, you lose 12, and get $3+7+2=12$.

If B wins, you lose $8+5=13$, and get $7+6=13$.

If

If neither win, you lose 8, and get $6+2=8$.

Suppose it to be two to one against A, and six to one against B, what are the different odds as before? $\frac{1}{3}+\frac{1}{7}=\frac{7+3=10:}{21}$ the odds on A against B are seven to three; and are eleven to ten on the field against A and B.

PROOF.

7 to 3 on A against B, neither win.
10 to 11 on A, B, against the field.
16 to 8 against A.
12 to 2 against B.

Suppose it to be five to two against A, and three to one against B, what are the different odds as before? $\frac{2}{7}+\frac{1}{4}=\frac{8+7=15:}{28}$ it is eight to seven on A against B; and it is fifteen to thirteen on A, B, against the field.

PROOF.

8 to 7 on A against B, neither win.
15 to 13 A, B, against the field.
25 to 10 against A.
15 to 5 against B.

Suppose

Suppose it to be seven to four against A, and seven to two against B, what are the odds as before? $\frac{4}{11}+\frac{2}{9}=\frac{36+22=58}{99}$: It is thirty-six to twenty-two on A against B; and fifty-eight to forty-one, on A, B, against the field.

PROOF.

36 to 22 on A against B, neither win.
58 to 41 on A, B, against the field.
77 to 44 against A.
49 to 14 against B.

In

In the following Tables, you have all the different odds that are on all the different changes of two and three events; from six to one for you, to six to one against you: they are so precisely and conspicuously laid down, that, at a cursory view, you may find the accurate odds sought for.

Two Events, both in your favour.				1st Col. That you do win both.	2d. That you do not lose both	3d. That you do not win the first, and lose the second.	4th. That you do not lose the first, and win the second.
6 *to* 1		6 *to* 1		36 *to* 13	48 *to* 1	43 *to* 6	43 *to* 6
6 *to* 1		5 *to* 1		30 *to* 12	41 *to* 1	6 *to* 1	37 *to* 5
6 *to* 1		4 *to* 1		24 *to* 11	34 *to* 1	29 *to* 6	31 *to* 4
6 *to* 1		7 *to* 2		2 *to* 1	61 *to* 2	51 *to* 12	8 *to* 1
6 *to* 1		3 *to* 1		9 *to* 5	27 *to* 1	11 *to* 3	25 *to* 3
6 *to* 1		5 *to* 2		30 *to* 19	47 *to* 2	37 *to* 12	44 *to* 5
6 *to* 1		2 *to* 1		4 *to* 3	20 *to* 1	15 *to* 6	19 *to* 2
6 *to* 1		7 *to* 4		6 *to* 5	73 *to* 4	53 *to* 24	10 *to* 1
6 *to* 1		3 *to* 2		18 *to* 17	33 *to* 2	23 *to* 12	32 *to* 3
6 *to* 1		5 *to* 4		10 *to* 11	59 *to* 4	39 *to* 24	58 *to* 5
6 *to* 1		*even*		3 *to* 4	13 *to* 1	4 *to* 3	13 *to* 1
5 *to* 1		5 *to* 1		25 *to* 11	35 *to* 1	31 *to* 5	31 *to* 5
5 *to* 1		4 *to* 1		2 *to* 1	29 *to* 1	5 *to* 1	26 *to* 4
5 *to* 1		7 *to* 2		35 *to* 19	26 *to* 1	44 *to* 10	47 *to* 7
5 *to* 1		3 *to* 1		15 *to* 9	23 *to* 1	19 *to* 5	7 *to* 1
5 *to* 1		5 *to* 2		25 *to* 17	20 *to* 1	32 *to* 10	37 *to* 5
5 *to* 1		2 *to* 1		5 *to* 4	17 *to* 1	13 *to* 5	8 *to* 1
5 *to* 1	AND	7 *to* 4	ARE	35 *to* 1	62 *to* 4	46 *to* 20	59 *to* 7
5 *to* 1		3 *to* 2		*even*	14 *to* 1	2 *to* 1	9 *to* 1
5 *to* 1		5 *to* 4		25 *to* 29	50 *to* 4	17 *to* 10	49 *to* 5
5 *to* 1		*even*		5 *to* 7	11 *to* 1	7 *to* 5	11 *to* 1
4 *to* 1		4 *to* 1		16 *to* 9	24 *to* 1	21 *to* 4	21 *to* 4
4 *to* 1		7 *to* 2		28 *to* 17	43 *to* 2	37 *to* 8	38 *to* 7
4 *to* 1		3 *to* 1		3 *to* 2	19 *to* 1	4 *to* 1	17 *to* 3
4 *to* 1		5 *to* 2		4 *to* 3	33 *to* 2	27 *to* 8	6 *to* 1
4 *to* 1		2 *to* 1		8 *to* 7	14 *to* 1	11 *to* 4	13 *to* 2
4 *to* 1		7 *to* 4		28 *to* 27	51 *to* 4	39 *to* 16	48 *to* 7
4 *to* 1		3 *to* 2		12 *to* 13	23 *to* 2	17 *to* 8	22 *to* 3
4 *to* 1		5 *to* 4		4 *to* 5	41 *to* 4	29 *to* 16	8 *to* 1
4 *to* 1		*even*		2 *to* 3	9 *to* 1	3 *to* 2	9 *to* 1
3 *to* 1		3 *to* 1		9 *to* 7	15 *to* 1	13 *to* 3	13 *to* 3
3 *to* 1		5 *to* 2		15 *to* 13	13 *to* 1	22 *to* 6	23 *to* 5
3 *to* 1		2 *to* 1		*even*	11 *to* 1	3 *to* 1	5 *to* 1
3 *to* 1		7 *to* 4		21 *to* 23	10 *to* 1	16 *to* 6	37 *to* 7

Two Events, both in your favour.				1st Col. That you win both.	2d. That you do not lose both.	3d. That you do not win the first, and lose the second.	4th. That you do not lose the first, and win the second.
3 *to* 1		3 *to* 2		9 *to* 11	9 *to* 1	7 *to* 3	17 *to* 3
3 *to* 1		5 *to* 4		15 *to* 21	8 *to* 1	2 *to* 1	31 *to* 5
3 *to* 1		*even*		3 *to* 5	7 *to* 1	5 *to* 3	7 *to* 1
5 *to* 2		5 *to* 2		25 *to* 24	45 *to* 4	39 *to* 10	39 *to* 10
5 *to* 2		2 *to* 1		10 *to* 11	19 *to* 2	16 *to* 5	17 *to* 4
5 *to* 2		7 *to* 4		5 *to* 6	69 *to* 8	57 *to* 20	63 *to* 14
5 *to* 2		3 *to* 2		3 *to* 4	31 *to* 4	5 *to* 2	29 *to* 6
5 *to* 2		5 *to* 4		25 *to* 38	55 *to* 8	43 *to* 20	53 *to* 10
5 *to* 2		*even*		5 *to* 9	6 *to* 1	9 *to* 5	6 *to* 1
2 *to* 1		2 *to* 1		4 *to* 5	8 *to* 1	7 *to* 2	7 *to* 2
2 *to* 1		7 *to* 4		14 *to* 19	29 *to* 4	25 *to* 8	28 *to* 7
2 *to* 1		3 *to* 2		2 *to* 3	13 *to* 2	11 *to* 4	4 *to* 1
2 *to* 1	AND	5 *to* 4	ARE	10 *to* 17	23 *to* 4	19 *to* 8	22 *to* 5
2 *to* 1		*even*		1 *to* 2	5 *to* 1	2 *to* 1	5 *to* 1
7 *to* 4		7 *to* 4		49 *to* 72	105 *to* 16	93 *to* 28	93 *to* 28
7 *to* 4		3 *to* 2		21 *to* 34	47 *to* 8	41 *to* 14	43 *to* 12
7 *to* 4		5 *to* 4		35 *to* 64	83 *to* 16	71 *to* 28	79 *to* 20
7 *to* 4		*even*		7 *to* 15	9 *to* 2	15 *to* 7	9 *to* 2
3 *to* 2		3 *to* 2		9 *to* 16	21 *to* 4	19 *to* 6	19 *to* 6
3 *to* 2		5 *to* 4		1 *to* 2	37 *to* 8	33 *to* 12	7 *to* 2
3 *to* 2		*even*		3 *to* 7	4 *to* 1	7 *to* 3	4 *to* 1
5 *to* 4		5 *to* 4		25 *to* 56	65 *to* 16	61 *to* 20	61 *to* 20
5 *to* 4		*even*		5 *to* 13	7 *to* 2	13 *to* 5	7 *to* 2
even		*even*		1 *to* 3	3 *to* 1	3 *to* 1	3 *to* 1

An explanation to the foregoing tables on two events, wherein you have 232 changes, from six to one for you, to six to one against you; according to the current odds on each event.

In the first line, you begin with six to one, both for you in the first column; in the second, it is six to one against you on each; in the third, it is six to one for you, and six to one against you; and, in the fourth, the same though reversed.

Suppose you have two events where it is six to one, and three to one both for you; look for six to one and three to one, and you will find it to be, in the first column, 9 to 5 that you win both; in the second column it is twenty-seven to one against your losing both, which is equally the same as if it had been six to one and three to one both against you, and that you did not win both; in the third column, it is eleven to three that you do not win the first and lose the second, which is equally the same as if it had been six to one for you and three to one against you, and that you did not win both; and, in the fourth column, it is twenty-five to three that you do not lose the first and win the second, which is the same as if it was six to one against you on the first, and three to one for you on the second.

The

The following Tables on Three Events, from six to one for you, to six to one against you, which admit of one thousand seven hundred and sixty different changes or forms in their coming off, are regularly ranged; with the accurate odds to every change or form of each, and measured as low as either the integers or fractions would admit (the first column, where the odds are against your winning them all, excepted).

Three Events, all in your favour.						1st. Against your winning them all.	2d. Against your losing all.	3d. Against your winning the first, and losing the second and third.
6 to 1	6 to 1		6 to 1			127 to 216	342 to 1	$56\frac{1}{6}$ to 1
6 1	6 1		5 1			19 30	293 1	48 1
6 1	6 1		4 1			101 144	244 1	$39\frac{5}{6}$ 1
6 1	6 1		3 1			22 27	195 1	$31\frac{2}{3}$ 1
6 1	6 1		5 2			163 180	341 2	$27\frac{7}{22}$ 1
6 1	6 1		2 1			75 72	146 1	$23\frac{1}{2}$ 1
6 1	6 1		7 4			287 252	$133\frac{3}{4}$ 1	$21\frac{11}{24}$ 1
6 1	6 1		3 2			137 108	$121\frac{1}{2}$ 1	$19\frac{5}{12}$ 1
6 1	6 1		5 4			87 60	$109\frac{1}{4}$ 1	$17\frac{9}{24}$ 1
6 1	6 1		*even*			31 18	97 1	$15\frac{1}{3}$ 1
6 1	5 1		5 *to* 1			17 25	251 1	41 1
6 1	5 1		4 1			3 4	209 1	34 1
6 1	5 1		3 1			13 15	167 1	27 1
6 1	5 1		5 2			24 25	146 1	$23\frac{1}{2}$ 1
6 1	5 1		2 1			11 10	125 1	20 1
6 1	5 1		7 4			6 5	$114\frac{1}{2}$ 1	$18\frac{1}{4}$ 1
6 1	5 1	AND	3 2	ARE		4 3	104 1	$16\frac{1}{2}$ 1
6 1	5 1		5 4			38 25	$93\frac{1}{2}$ 1	$14\frac{3}{4}$ 1
6 1	5 1		*even*			9 5	83 1	13 1
6 1	4 1		4 *to* 1			79 96	174 1	$28\frac{1}{6}$ 1
6 1	4 1		3 1			17 18	139 1	$22\frac{1}{3}$ 1
6 1	4 1		5 2			25 24	$121\frac{1}{2}$ 1	$19\frac{5}{12}$ 1
6 1	4 1		2 1			19 16	104 1	$16\frac{1}{2}$ 1
6 1	4 1		7 4			31 24	$95\frac{1}{4}$ 1	$15\frac{1}{24}$ 1
6 1	4 1		3 2			103 72	$86\frac{1}{2}$ 1	$13\frac{7}{12}$ 1
6 1	4 1		5 4			13 8	$77\frac{3}{4}$ 1	$12\frac{1}{8}$ 1
6 1	4 1		*even*			23 12	69 1	$10\frac{2}{3}$ 1
6 1	3 1		3 *to* 1			29 27	111 1	$17\frac{2}{3}$ 1
6 1	3 1		5 2			53 45	97 1	$15\frac{1}{3}$ 1
6 1	3 1		2 1			4 3	83 1	13 1
6 1	3 1		7 4			13 9	76 1	$11\frac{5}{6}$ 1
6 1	3 1		3 2			43 27	69 1	$10\frac{7}{8}$ 1
6 1	3 1		5 4			9 5	62 1	$9\frac{1}{2}$ 1
6 1	3 1		*even*			19 9	55 1	$8\frac{1}{3}$ 1

4th. Against your winning the first and second and losing the third.		5th. Against your losing the first, and winning the second and third.		6th. Against your losing the first and second, and winning the third.		7th. Against your winning the first and third, and losing the second.		8th. Against your losing the first and third, and winning the second.	
$8\frac{19}{36}$ *to*	1	$8\frac{19}{36}$ *to*	1	$56\frac{1}{6}$ *to*	1	$8\frac{19}{36}$ *to*	1	$56\frac{1}{6}$ *to*	1
$7\frac{1}{6}$	1	$8\frac{4}{5}$	1	$57\frac{4}{5}$	1	$8\frac{4}{5}$	1	48	1
$5\frac{29}{36}$	1	$9\frac{5}{24}$	1	$60\frac{1}{4}$	1	$9\frac{5}{24}$	1	$39\frac{5}{6}$	1
$4\frac{4}{9}$	1	$9\frac{8}{9}$	1	$64\frac{1}{3}$	1	$9\frac{8}{9}$	1	$31\frac{2}{3}$	1
$3\frac{55}{72}$	1	$10\frac{13}{30}$	1	$67\frac{3}{5}$	1	$10\frac{13}{30}$	1	$27\frac{7}{12}$	1
$3\frac{1}{12}$	1	$11\frac{1}{4}$	1	$72\frac{1}{2}$	1	$11\frac{1}{4}$	1	$23\frac{1}{2}$	1
$2\frac{107}{144}$	1	$11\frac{5}{6}$	1	76	1	$11\frac{5}{6}$	1	$21\frac{11}{24}$	1
$2\frac{29}{72}$	1	$12\frac{11}{18}$	1	$80\frac{2}{3}$	1	$12\frac{11}{18}$	1	$19\frac{5}{12}$	1
$2\frac{1}{16}$	1	$13\frac{21}{30}$	1	$87\frac{1}{5}$	1	$13\frac{21}{30}$	1	$17\frac{9}{24}$	1
31	18	$15\frac{1}{3}$	1	97	1	$15\frac{1}{3}$	1	$15\frac{1}{3}$	1
$7\frac{2}{5}$	1	$9\frac{2}{25}$	1	$49\frac{2}{5}$	1	$7\frac{2}{5}$	1	$49\frac{2}{5}$	1
6	1	$9\frac{1}{2}$	1	$51\frac{1}{2}$	1	$7\frac{3}{4}$	1	41	1
$4\frac{3}{5}$	1	$10\frac{1}{5}$	1	55	1	$8\frac{1}{3}$	1	$32\frac{3}{5}$	1
$3\frac{9}{10}$	1	$10\frac{19}{25}$	1	$57\frac{4}{5}$	1	$8\frac{4}{5}$	1	$28\frac{2}{5}$	1
$3\frac{1}{5}$	1	$11\frac{3}{5}$	1	62	1	$9\frac{1}{2}$	1	$24\frac{1}{5}$	1
$2\frac{17}{20}$	1	$12\frac{1}{5}$	1	65	1	10	1	$22\frac{1}{10}$	1
5	2	13	1	69	1	$10\frac{2}{3}$	1	20	1
$2\frac{3}{26}$	1	$14\frac{3}{25}$	1	$74\frac{3}{5}$	1	$11\frac{3}{5}$	1	$17\frac{9}{10}$	1
9	5	$15\frac{4}{5}$	1	83	1	13	1	$15\frac{4}{5}$	1
$6\frac{7}{24}$	1	$9\frac{15}{16}$	1	$42\frac{3}{4}$	1	$6\frac{7}{24}$	1	$43\frac{3}{4}$	1
$4\frac{5}{6}$	1	$10\frac{2}{3}$	1	$45\frac{2}{3}$	1	$6\frac{7}{9}$	1	34	1
$4\frac{5}{48}$	1	$11\frac{1}{4}$	1	48	1	$7\frac{1}{6}$	1	$29\frac{5}{8}$	1
$3\frac{9}{24}$	1	$12\frac{1}{8}$	1	$51\frac{1}{2}$	1	$7\frac{3}{4}$	1	$25\frac{1}{4}$	1
$3\frac{1}{96}$	1	$12\frac{3}{4}$	1	54	1	$8\frac{1}{6}$	1	$23\frac{1}{16}$	1
$2\frac{31}{48}$	1	$13\frac{7}{12}$	1	$57\frac{1}{3}$	1	$8\frac{13}{18}$	1	$20\frac{7}{8}$	1
$2\frac{9}{32}$	1	$14\frac{3}{4}$	1	62	1	$9\frac{1}{2}$	1	$18\frac{11}{16}$	1
23	12	$16\frac{1}{2}$	1	69	1	$10\frac{2}{3}$	1	$16\frac{1}{2}$	1
$5\frac{2}{9}$	1	$11\frac{4}{9}$	1	$36\frac{1}{3}$	1	$5\frac{2}{9}$	1	$36\frac{1}{3}$	1
$4\frac{4}{9}$	1	$12\frac{1}{15}$	1	$38\frac{1}{5}$	1	$5\frac{8}{15}$	1	$31\frac{2}{3}$	1
$3\frac{2}{3}$	1	13	1	41	1	6	1	27	1
$3\frac{5}{18}$	1	$13\frac{2}{3}$	1	43	1	$6\frac{1}{3}$	1	$24\frac{2}{3}$	1
$2\frac{8}{9}$	1	$14\frac{5}{9}$	1	$45\frac{2}{3}$	1	$6\frac{7}{9}$	1	$22\frac{1}{3}$	1
5	2	$15\frac{4}{5}$	1	$49\frac{2}{5}$	1	$7\frac{2}{5}$	1	20	1
$2\frac{1}{9}$	1	$17\frac{2}{3}$	1	55	1	$8\frac{1}{3}$	1	$17\frac{2}{3}$	1

Three Events, all in your Favour.					1st. Col. Against your winning them all.	2d. Against your losing all.	3d. Against your winning the first, and losing the second and third.
6 to 1	5 to 2		5 to 2		193 to 150	$84\frac{3}{4}$ to 1	$13\frac{7}{24}$ to 1
6 1	5 2		2 1		29 20	$27\frac{1}{2}$ 1	$11\frac{1}{4}$ 1
6 1	5 2		7 4		329 210	$66\frac{3}{8}$ 1	$10\frac{11}{48}$ 1
6 1	5 2		3 2		31 18	$60\frac{1}{4}$ 1	$9\frac{5}{24}$ 1
6 1	5 2		5 4		291 150	$54\frac{1}{8}$ 1	$8\frac{3}{16}$ 1
6 1	5 2		even		34 15	48 1	$7\frac{1}{6}$ 1
6 1	2 1		2 to 1		39 24	62 1	$9\frac{1}{2}$ 1
6 1	2 1		7 4		7 4	$56\frac{3}{4}$ 1	$8\frac{5}{8}$ 1
6 1	2 1		3 2		23 12	$51\frac{1}{2}$ 1	$7\frac{3}{4}$ 1
6 1	2 1		5 4		129 60	$46\frac{1}{4}$ 1	$6\frac{7}{8}$ 1
6 1	2 1		even		5 2	41 1	6 1
6 1	7 4		7 to 4		79 42	$51\frac{15}{16}$ 1	$7\frac{79}{96}$ 1
6 1	7 4		3 2		$2\frac{1}{18}$ 1	$47\frac{1}{8}$ 1	$7\frac{1}{48}$ 1
6 1	7 4		5 4		23 10	$42\frac{5}{16}$ 1	$6\frac{7}{32}$ 1
6 1	7 4		even		8 3	$37\frac{1}{2}$ 1	$5\frac{5}{12}$ 1
6 1	3 2		3 to 2		$2\frac{13}{54}$ 1	$42\frac{3}{4}$ 1	$6\frac{7}{24}$ 1
6 1	3 2	AND	5 4	ARE	5 2	$38\frac{3}{8}$ 1	$5\frac{9}{16}$ 1
6 1	3 2		even		26 9	34 1	$4\frac{5}{6}$ 1
6 1	5 4		5 to 4		139 50	$34\frac{7}{16}$ 1	$4\frac{29}{32}$ 1
6 1	5 4		even		16 5	$30\frac{1}{2}$ 1	$4\frac{1}{4}$ 1
6 1	even		even		22 6	27 1	$3\frac{2}{3}$ 1
5 1	5 1		5 to 1		91 125	215 1	$42\frac{1}{5}$ 1
5 1	5 1		4 1		4 5	179 1	35 1
5 1	5 1		3 1		23 25	143 1	$27\frac{4}{5}$ 1
5 1	5 1		5 2		127 125	125 1	$24\frac{1}{5}$ 1
5 1	5 1		2 1		29 25	107 1	$20\frac{3}{5}$ 1
5 1	5 1		7 4		221 175	98 1	$18\frac{4}{5}$ 1
5 1	5 1		3 2		7 5	89 1	17 1
5 1	5 1		5 4		199 125	80 1	$15\frac{1}{5}$ 1
5 1	5 1		even		47 25	71 1	$13\frac{2}{5}$ 1
5 1	4 1		4 to 1		7 8	149 1	29 1
5 1	4 1		3 1		even	119 1	23 1
5 1	4 1		5 2		11 to 10	104 1	20 1
5 1	4 1		2 1		5 4	89 1	17 1

4th. Against your winning the first and second, and losing the third.		5th. Against your losing the first, and winning the second and third.		6th. Against your losing the first and second, and winning the third.		7th. Against your winning the first and third, and losing the second.		8th. Against your losing the first and third, and winning the second.	
$4\frac{43}{60}$	*to* 1	$12\frac{18}{25}$	*to* 1	$33\frac{3}{10}$	*to* 1	$4\frac{43}{60}$	*to* 1	$33\frac{3}{10}$	*to* 1
$3\frac{9}{10}$	1	$13\frac{7}{10}$	1	$35\frac{3}{4}$	1	$5\frac{1}{8}$	1	$28\frac{2}{5}$	1
$3\frac{50}{120}$	1	$14\frac{2}{5}$	1	$37\frac{1}{2}$	1	$5\frac{5}{12}$	1	$25\frac{19}{20}$	1
$3\frac{1}{12}$	1	$15\frac{1}{2}$	1	$39\frac{5}{6}$	1	$5\frac{29}{36}$	1	$23\frac{1}{2}$	1
$2\frac{27}{40}$	1	$16\frac{16}{25}$	1	$43\frac{1}{10}$	1	$6\frac{7}{20}$	1	$21\frac{1}{20}$	1
34	15	$18\frac{3}{8}$	1	48	1	$7\frac{1}{6}$	1	$18\frac{3}{5}$	1
$4\frac{1}{4}$	1	$14\frac{3}{4}$	1	$30\frac{1}{2}$	1	$4\frac{1}{4}$	1	$30\frac{1}{2}$	1
$3\frac{39}{48}$	1	$15\frac{1}{2}$	1	32	1	$4\frac{1}{2}$	1	$27\frac{7}{8}$	1
$3\frac{3}{4}$	1	$16\frac{1}{2}$	1	34	1	$4\frac{5}{6}$	1	$25\frac{1}{4}$	1
$2\frac{15}{16}$	1	$17\frac{9}{10}$	1	$36\frac{4}{5}$	1	$5\frac{9}{10}$	1	$22\frac{5}{8}$	1
5	2	20	1	41	1	6	1	20	1
$4\frac{1}{24}$	1	$16\frac{2}{7}$	1	$29\frac{1}{4}$	1	$4\frac{1}{24}$	1	$29\frac{1}{4}$	1
$3\frac{7}{12}$	1	$17\frac{1}{3}$	1	$31\frac{1}{12}$	1	$4\frac{25}{72}$	1	$26\frac{1}{2}$	1
$3\frac{1}{8}$	1	$18\frac{4}{5}$	1	$33\frac{11}{20}$	1	$4\frac{93}{120}$	1	$23\frac{3}{4}$	1
$2\frac{1}{3}$	1	21	1	$37\frac{1}{2}$	1	$5\frac{5}{12}$	1	21	1
$3\frac{21}{36}$	1	$18\frac{4}{9}$	1	$28\frac{1}{6}$	1	$3\frac{31}{36}$	1	$28\frac{1}{6}$	1
$3\frac{3}{8}$	1	20	1	$30\frac{1}{2}$	1	$4\frac{1}{4}$	1	$25\frac{1}{4}$	1
26	9	$22\frac{1}{3}$	1	34	1	$4\frac{5}{6}$	1	$22\frac{1}{3}$	1
$3\frac{29}{40}$	1	$21\frac{17}{25}$	1	$27\frac{7}{20}$	1	$3\frac{29}{40}$	1	$27\frac{7}{10}$	1
$3\frac{1}{5}$	1	$24\frac{1}{5}$	1	$30\frac{1}{2}$	1	$4\frac{1}{4}$	1	$24\frac{1}{5}$	1
$3\frac{2}{3}$	1	27	1	27	1	$3\frac{2}{3}$	1	27	1
$7\frac{16}{25}$	1	$7\frac{16}{25}$	1	$42\frac{1}{5}$	1	$7\frac{16}{25}$	1	$42\frac{1}{5}$	1
$6\frac{1}{5}$	1	8	1	44	1	8	1	35	1
$4\frac{19}{25}$	1	$8\frac{3}{5}$	1	47	1	$8\frac{3}{5}$	1	$27\frac{4}{5}$	1
$4\frac{1}{25}$	1	$9\frac{2}{25}$	1	$49\frac{2}{5}$	1	$9\frac{2}{25}$	1	$24\frac{1}{5}$	1
$3\frac{8}{25}$	1	$9\frac{4}{5}$	1	53	1	$9\frac{4}{5}$	1	$20\frac{3}{5}$	1
$2\frac{24}{25}$	1	$10\frac{11}{35}$	1	$55\frac{4}{7}$	1	$10\frac{11}{35}$	1	$18\frac{4}{5}$	1
$2\frac{3}{5}$	1	11	1	59	1	11	1	17	1
$2\frac{6}{25}$	1	$11\frac{24}{25}$	1	$63\frac{4}{5}$	1	$11\frac{24}{25}$	1	$15\frac{1}{5}$	1
47	25	$13\frac{2}{5}$	1	71	1	$13\frac{2}{5}$	1	$13\frac{2}{5}$	1
$6\frac{1}{2}$	1	$8\frac{3}{8}$	1	$36\frac{1}{2}$	1	$6\frac{1}{2}$	1	$36\frac{1}{2}$	1
5	1	9	1	29	1	7	1	29	1
4	1	$9\frac{1}{2}$	1	41	1	$7\frac{2}{5}$	1	$25\frac{1}{4}$	1
3	1	$10\frac{1}{4}$	1	44	1	$8\frac{3}{7}$	1	$21\frac{1}{2}$	1

Three Events, all in your favour.					1st Col. Against your winning them all.	2d. Against your losing all.	3d. Against your winning the first, and losing the second and third.
5 *to* 1	4 *to* 1		7 *to* 4		19 *to* 14	$81\frac{1}{2}$ *to* 1	$15\frac{1}{2}$ *to* 1
5 1	4 1		3 2		3 2	74 1	14 1
5 1	4 1		5 4		17 10	$66\frac{1}{2}$ 1	$12\frac{1}{2}$ 1
5 1	4 1		*even*		2 1	59 1	11 1
5 1	3 1		3 *to* 1		51 45	95 1	$18\frac{1}{5}$ 1
5 1	3 1		5 2		31 25	83 1	$15\frac{4}{5}$ 1
5 1	3 1		2 1		7 5	71 1	$13\frac{2}{5}$ 1
5 1	3 1		7 4		159 105	65 1	$12\frac{1}{5}$ 1
5 1	3 1		3 2		5 3	59 1	11 1
5 1	3 1		5 4		47 25	53 1	$9\frac{4}{5}$ 1
5 1	3 1		*even*		11 5	47 1	$8\frac{3}{5}$ 1
5 1	5 2		5 *to* 2		169 125	$72\frac{1}{2}$ 1	$13\frac{7}{10}$ 1
5 1	5 2		2 1		38 25	62 1	$11\frac{3}{5}$ 1
5 1	5 2		7 4		41 25	$56\frac{3}{4}$ 1	$10\frac{11}{20}$ 1
5 1	5 2		3 2		9 5	$51\frac{1}{2}$ 1	$9\frac{1}{2}$ 1
5 1	5 2		5 4		253 125	$46\frac{1}{4}$ 1	$8\frac{9}{20}$ 1
5 1	5 2	AND	*even*	ARE	59 25	41 1	$7\frac{2}{5}$ 1
5 1	2 1		2 *to* 1		17 10	53 1	$9\frac{4}{5}$ 1
5 1	2 1		7 4		64 35	$48\frac{1}{2}$ 1	$8\frac{9}{10}$ 1
5 1	2 1		3 2		2 1	44 1	8 1
5 1	2 1		5 4		56 25	$39\frac{1}{2}$ 1	$7\frac{1}{10}$ 1
5 1	2 1		*even*		13 5	35 1	$6\frac{1}{5}$ 1
5 1	7 4		7 *to* 4		481 245	$44\frac{3}{8}$ 1	$8\frac{3}{40}$ 1
5 1	7 4		3 2		225 105	$40\frac{1}{4}$ 1	$7\frac{1}{4}$ 1
5 1	7 4		5 4		419 175	$36\frac{1}{8}$ 1	$6\frac{17}{40}$ 1
5 1	7 4		*even*		97 35	32 1	$5\frac{3}{5}$ 1
5 1	3 2		3 *to* 2		7 3	$36\frac{1}{2}$ 1	$6\frac{1}{2}$ 1
5 1	3 2		5 4		13 5	$32\frac{3}{4}$ 1	$5\frac{3}{4}$ 1
5 1	3 2		*even*		3 1	29 1	5 1
5 1	5 4		5 *to* 4		361 125	$29\frac{3}{8}$ 1	$5\frac{3}{40}$ 1
5 1	5 4		*even*		83 25	26 1	$4\frac{2}{5}$ 1
5 1	*even*		*even*		19 5	23 1	$3\frac{4}{5}$ 1
4 1	4 *to* 1		4 *to* 1		61 64	124 1	$30\frac{1}{4}$ 1
4 1	4 1		3 1		13 12	99 1	24 1

4th. Against your winning the first and second, and losing the third.	5th. Against your losing the first, and winning the second and third.	6th. Against your losing the first and second, and winning the third.	7th. Against your winning the first and third, and losing the second.	8th. Against your losing the first and third, and winning the second.
$3\frac{1}{8}$ *to* 1	$10\frac{11}{14}$ *to* 1	$46\frac{1}{7}$ *to* 1	9 *to* 1	$19\frac{5}{8}$ *to* 1
$2\frac{3}{4}$ 1	$11\frac{1}{2}$ 1	49 1	9 1	$17\frac{3}{4}$ 1
$2\frac{3}{8}$ 1	$12\frac{1}{2}$ 1	53 1	$9\frac{4}{5}$ 1	$15\frac{7}{8}$ 1
2 1	14 1	59 1	11 1	14 1
$5\frac{2}{5}$ 1	$9\frac{2}{3}$ 1	31 1	$5\frac{2}{5}$ 1	31 1
$4\frac{3}{5}$ 1	$10\frac{1}{5}$ 1	$32\frac{3}{5}$ 1	$5\frac{18}{25}$ 1	27 1
$3\frac{4}{5}$ 1	11 1	35 1	$6\frac{1}{5}$ 1	23 1
$3\frac{2}{5}$ 1	$11\frac{4}{7}$ 1	$36\frac{5}{7}$ 1	$6\frac{19}{35}$ 1	21 1
3 1	$12\frac{1}{3}$ 1	39 1	7 1	19 1
$2\frac{3}{5}$ 1	$13\frac{2}{5}$ 1	$42\frac{1}{5}$ 1	$7\frac{16}{25}$ 1	17 1
$2\frac{1}{5}$ 1	15 1	47 1	$8\frac{3}{5}$ 1	15 1
$4\frac{22}{25}$ 1	$10\frac{19}{25}$ 1	$28\frac{2}{5}$ 1	$4\frac{22}{25}$ 1	$28\frac{2}{5}$ 1
$4\frac{1}{25}$ 1	$11\frac{3}{5}$ 1	$30\frac{1}{2}$ 1	$5\frac{3}{10}$ 1	$24\frac{1}{5}$ 1
$3\frac{31}{50}$ 1	$12\frac{1}{5}$ 1	32 1	$5\frac{3}{5}$ 1	$22\frac{1}{10}$ 1
$3\frac{1}{5}$ 1	13 1	34 1	6 1	20 1
$2\frac{39}{50}$ 1	$14\frac{3}{25}$ 1	$36\frac{4}{5}$ 1	$6\frac{14}{25}$ 1	$17\frac{9}{10}$ 1
$2\frac{9}{25}$ 1	$15\frac{4}{5}$ 1	41 1	$7\frac{2}{5}$ 1	$15\frac{4}{5}$ 1
$4\frac{2}{5}$ 1	$12\frac{1}{2}$ 1	26 1	$4\frac{2}{5}$ 1	26 1
$3\frac{19}{20}$ 1	$13\frac{1}{7}$ 1	$27\frac{2}{7}$ 1	$4\frac{23}{35}$ 1	$23\frac{3}{4}$ 1
$3\frac{1}{2}$ 1	14 1	29 1	5 1	$21\frac{1}{2}$ 1
$3\frac{1}{20}$ 1	$15\frac{1}{5}$ 1	$31\frac{2}{5}$ 1	$5\frac{12}{25}$ 1	$19\frac{1}{4}$ 1
$2\frac{3}{5}$ 1	17 1	35 1	$6\frac{1}{5}$ 1	17 1
$4\frac{13}{70}$ 1	$13\frac{40}{49}$ 1	$24\frac{13}{14}$ 1	$4\frac{13}{70}$ 1	$24\frac{13}{14}$ 1
$3\frac{5}{7}$ 1	$14\frac{5}{7}$ 1	$26\frac{1}{2}$ 1	$4\frac{1}{2}$ 1	$22\frac{4}{7}$ 1
$3\frac{17}{70}$ 1	$15\frac{34}{35}$ 1	$28\frac{7}{10}$ 1	$4\frac{47}{50}$ 1	$20\frac{3}{14}$ 1
$2\frac{27}{35}$ 1	$17\frac{6}{7}$ 1	32 1	$5\frac{3}{5}$ 1	$17\frac{6}{7}$ 1
4 1	$15\frac{2}{3}$ 1	24 1	4 1	24 1
$3\frac{1}{2}$ 1	17 1	26 1	$4\frac{2}{5}$ 1	$21\frac{1}{2}$ 1
3 1	19 1	29 1	5 1	19 1
$3\frac{43}{50}$ 1	$18\frac{11}{25}$ 1	$23\frac{3}{10}$ 1	$3\frac{43}{50}$ 1	$23\frac{3}{10}$ 1
$3\frac{8}{25}$ 1	$20\frac{3}{5}$ 1	26 1	$4\frac{2}{5}$ 1	$20\frac{3}{5}$ 1
$3\frac{4}{5}$ 1	23 1	23 1	$3\frac{4}{5}$ 1	23 1
$6\frac{13}{16}$ 1	$6\frac{13}{16}$ 1	$30\frac{1}{4}$ 1	$6\frac{13}{16}$ 1	$30\frac{1}{4}$ 1
$5\frac{1}{4}$ 1	$7\frac{1}{3}$ 1	$32\frac{1}{3}$ 1	$7\frac{1}{8}$ 1	24 1

Three Events, all in your favour.					1st Col. Against your winning them all.	2d. Against your losing all.	3d. Against your winning the first, and losing the second and third.
4 to 1	4 to 1		5 to 2		19 to 16	$86\frac{1}{2}$ to 1	$20\frac{7}{8}$ to 1
4 1	4 1		2 1		43 32	74 1	$17\frac{3}{4}$ 1
4 1	4 1		7 4		163 112	$67\frac{3}{4}$ 1	$16\frac{3}{16}$ 1
4 1	4 1		3 2		77 48	$61\frac{1}{2}$ 1	$14\frac{5}{8}$ 1
4 1	4 1		5 4		29 16	$55\frac{1}{4}$ 1	$13\frac{1}{16}$ 1
4 1	4 1		even		17 8	49 1	$11\frac{1}{2}$ 1
4 1	3 1		3 to 1		11 9	79 1	19 1
4 1	3 1		5 2		4 3	69 1	$16\frac{1}{2}$ 1
4 1	3 1		2 1		3 2	59 1	14 1
4 1	3 1		7 4		34 21	54 1	$12\frac{3}{4}$ 1
4 1	3 1		3 to 2		16 9	49 1	$11\frac{1}{2}$ 1
4 1	3 1		5 4		2 1	44 1	$10\frac{1}{4}$ 1
4 1	3 1		even		7 3	39 1	9 1
4 1	5 2		5 to 2		29 20	$60\frac{1}{4}$ 1	$14\frac{5}{16}$ 1
4 1	5 2		2 1		13 8	$51\frac{1}{2}$ 1	$12\frac{1}{8}$ 1
4 1	5 2		7 4		7 4	$47\frac{1}{8}$ 1	$11\frac{1}{32}$ 1
4 1	5 2	AND	3 2	ARE	23 12	$42\frac{3}{4}$ 1	$9\frac{15}{16}$ 1
4 1	5 2		5 4		43 20	$38\frac{3}{8}$ 1	$8\frac{27}{32}$ 1
4 1	5 2		even		5 2	34 1	$7\frac{3}{4}$ 1
4 1	2 1		2 to 1		29 16	44 1	$10\frac{1}{4}$ 1
4 1	2 1		7 4		109 56	$40\frac{1}{4}$ 1	$9\frac{5}{16}$ 1
4 1	2 1		3 2		17 8	$36\frac{1}{2}$ 1	$8\frac{3}{8}$ 1
4 1	2 1		5 4		19 8	$32\frac{3}{4}$ 1	$7\frac{7}{16}$ 1
4 1	2 1		even		11 4	29 1	$6\frac{1}{2}$ 1
4 1	7 4		7 to 4		409 196	$36\frac{13}{16}$ 1	$8\frac{29}{64}$ 1
4 1	7 4		3 2		191 84	$33\frac{3}{8}$ 1	$7\frac{19}{32}$ 1
4 1	7 4		5 4		71 28	$29\frac{15}{16}$ 1	$6\frac{47}{64}$ 1
4 1	7 4		even		41 14	$26\frac{1}{2}$ 1	$5\frac{7}{8}$ 1
4 1	3 2		3 to 2		89 36	$30\frac{1}{4}$ 1	$6\frac{13}{16}$ 1
4 1	3 2		5 4		11 4	$27\frac{1}{8}$ 1	$6\frac{1}{32}$ 1
4 1	3 2		even		19 6	24 1	$5\frac{1}{4}$ 1
4 1	5 4		5 to 4		61 20	$24\frac{5}{16}$ 1	$5\frac{21}{64}$ 1
4 1	5 4		even		7 2	$21\frac{1}{2}$ 1	$4\frac{5}{8}$ 1
4 1	even		even		4 1	19 1	4 1

4th. Against your winning the first and second, and losing the third.		5th. Against your losing the first, and winning the second and third.		6th. Against your losing the first and second, and winning the third.		7th. Against your winning the first and third, and losing the second.		8th. Against your losing the first and third, and winning the second.	
$4\frac{15}{32}$ *to*	1	$7\frac{3}{4}$ *to*	1	34 *to*	1	$7\frac{3}{4}$ *to*	1	$20\frac{7}{8}$ *to*	1
$3\frac{11}{16}$	1	$8\frac{3}{8}$	1	$36\frac{1}{2}$	1	$8\frac{3}{8}$	1	$17\frac{3}{4}$	1
$3\frac{19}{64}$	1	$8\frac{23}{28}$	1	$38\frac{2}{7}$	1	$8\frac{23}{28}$	1	$16\frac{3}{16}$	1
$2\frac{29}{32}$	1	$9\frac{5}{12}$	1	$40\frac{2}{3}$	1	$9\frac{5}{12}$	1	$14\frac{5}{8}$	1
$2\frac{33}{64}$	1	$10\frac{1}{4}$	1	44	1	$10\frac{1}{4}$	1	$13\frac{1}{16}$	1
$2\frac{1}{8}$	1	$11\frac{1}{2}$	1	49	1	$11\frac{1}{2}$	1	$11\frac{1}{2}$	1
$5\frac{2}{3}$	1	$7\frac{8}{9}$	1	$25\frac{2}{3}$	1	$5\frac{2}{5}$	1	$25\frac{2}{3}$	1
$4\frac{5}{6}$	1	$8\frac{1}{3}$	1	27	1	6	1	$22\frac{1}{3}$	1
4	1	9	1	29	1	$6\frac{1}{2}$	1	19	1
$3\frac{7}{12}$	1	$9\frac{10}{21}$	1	$30\frac{3}{7}$	1	$6\frac{6}{7}$	1	$17\frac{1}{3}$	1
$3\frac{1}{6}$	1	$10\frac{1}{9}$	1	$32\frac{1}{2}$	1	$7\frac{1}{3}$	1	$15\frac{2}{3}$	1
$2\frac{3}{4}$	1	11	1	35	1	8	1	14	1
$2\frac{1}{3}$	1	$12\frac{1}{3}$	1	39	1	9	1	$12\frac{1}{3}$	1
$5\frac{1}{8}$	1	$8\frac{4}{5}$	1	$23\frac{1}{2}$	1	$5\frac{1}{8}$	1	$23\frac{1}{2}$	1
$4\frac{1}{4}$	1	$9\frac{1}{2}$	1	$25\frac{1}{4}$	1	$5\frac{9}{16}$	1	20	1
$3\frac{13}{16}$	1	10	1	$26\frac{1}{2}$	1	$5\frac{7}{8}$	1	$18\frac{1}{4}$	1
$3\frac{3}{8}$	1	$10\frac{2}{3}$	1	$28\frac{1}{6}$	1	$6\frac{7}{24}$	1	$16\frac{1}{2}$	1
$2\frac{15}{16}$	1	$11\frac{3}{5}$	1	$30\frac{1}{2}$	1	$6\frac{7}{8}$	1	$14\frac{3}{4}$	1
5	1	13	1	34	1	$7\frac{3}{4}$	1	13	1
$4\frac{5}{8}$	1	$10\frac{1}{4}$	1	$21\frac{1}{2}$	1	$4\frac{5}{8}$	1	$21\frac{1}{2}$	1
$4\frac{5}{32}$	1	$10\frac{11}{14}$	1	$22\frac{4}{7}$	1	$4\frac{25}{28}$	1	$19\frac{5}{8}$	1
$3\frac{11}{16}$	1	$11\frac{1}{2}$	1	24	1	$5\frac{1}{4}$	1	$17\frac{3}{4}$	1
$3\frac{7}{32}$	1	$12\frac{1}{2}$	1	26	1	$5\frac{3}{4}$	1	$15\frac{7}{8}$	1
$2\frac{3}{4}$	1	14	1	29	1	$6\frac{1}{2}$	1	14	1
$4\frac{45}{112}$	1	$11\frac{17}{49}$	1	$20\frac{17}{28}$	1	$4\frac{45}{112}$	1	$20\frac{17}{28}$	1
$3\frac{51}{56}$	1	$12\frac{2}{21}$	1	$21\frac{11}{12}$	1	$4\frac{35}{48}$	1	$18\frac{9}{14}$	1
$3\frac{47}{112}$	1	$13\frac{1}{7}$	1	$23\frac{3}{4}$	1	$5\frac{3}{16}$	1	$16\frac{19}{28}$	1
$2\frac{13}{14}$	1	$14\frac{5}{7}$	1	$26\frac{1}{2}$	1	$5\frac{7}{8}$	1	$14\frac{5}{7}$	1
$4\frac{5}{24}$	1	$12\frac{8}{9}$	1	$19\frac{5}{6}$	1	$4\frac{5}{24}$	1	$19\frac{5}{6}$	1
$3\frac{33}{48}$	1	14	1	$21\frac{1}{2}$	1	$4\frac{5}{8}$	1	$17\frac{3}{4}$	1
$3\frac{1}{6}$	1	$15\frac{2}{3}$	1	24	1	$5\frac{1}{4}$	1	$15\frac{2}{3}$	1
$4\frac{1}{16}$	1	$15\frac{1}{15}$	1	$19\frac{1}{4}$	1	$4\frac{1}{16}$	1	$19\frac{1}{4}$	1
$3\frac{1}{2}$	1	17	1	$21\frac{1}{2}$	1	$4\frac{5}{8}$	1	17	1
4	1	19	1	19	1	4	1	19	1

Three Events, all in your favour.				1st Col. Against your winning them all.		2d. Against your losing all.		3d. Against your winning the first, and losing the second and third.	
3 to 1	3 to 1	AND	3 to 1	ARE	37 to 27	63 to 1		$20\frac{1}{3}$ to 1	
3 1	3 1		5 2		67 45	55 1		$17\frac{2}{3}$ 1	
3 1	3 1		2 1		5 3	47 1		15 1	
3 1	3 1		7 4		113 63	43 1		$13\frac{2}{3}$ 1	
3 1	3 1		3 2		53 27	39 1		$12\frac{1}{3}$ 1	
3 1	3 1		5 4		99 45	35 1		11 1	
3 1	3 1		even		23 9	31 1		$9\frac{2}{3}$ 1	
3 1	5 2		5 to 2		121 75	48 1		$15\frac{1}{3}$ 1	
3 1	5 2		2 1		9 5	41 1		13 1	
3 1	5 2		7 4		29 15	$37\frac{1}{2}$ 1		$11\frac{5}{6}$ 1	
3 1	5 2		3 2		19 9	34 1		$10\frac{7}{8}$ 1	
3 1	5 2		5 4		59 25	$30\frac{1}{2}$ 1		$9\frac{1}{2}$ 1	
3 1	5 2		even		41 15	27 1		$8\frac{1}{3}$ 1	
3 1	2 1		2 to 1		2 1	35 1		11 1	
3 1	2 1		7 4		15 7	32 1		10 1	
3 1	2 1		3 2		7 3	29 1		9 1	
3 1	2 1		5 4		13 5	26 1		8 1	
3 1	2 1		even		3 1	23 1		7 1	
3 1	7 4		7 to 4		337 147	$29\frac{1}{4}$ 1		$9\frac{1}{12}$ 1	
3 1	7 4		3 2		157 63	$26\frac{1}{2}$ 1		$8\frac{1}{6}$ 1	
3 1	7 4		5 4		97 35	$23\frac{3}{4}$ 1		$7\frac{1}{4}$ 1	
3 1	7 4		even		67 21	21 1		$6\frac{1}{3}$ 1	
3 1	3 2		3 to 2		73 27	24 1		$7\frac{1}{3}$ 1	
3 1	3 2		5 4		3 1	$21\frac{1}{2}$ 1		$6\frac{1}{2}$ 1	
3 1	3 2		even		31 9	19 1		$5\frac{7}{8}$ 1	
3 1	5 4		5 to 4		83 25	$19\frac{1}{4}$ 1		$5\frac{3}{4}$ 1	
3 1	5 4		even		19 5	17 1		5 1	
3 1	even		even		13 3	15 1		$4\frac{1}{3}$ 1	
5 2	5 2		5 to 2		218 125	$41\frac{7}{8}$ 1		$16\frac{3}{20}$ 1	
5 2	5 2		2 1		97 50	$35\frac{3}{4}$ 1		$13\frac{7}{10}$ 1	
5 2	5 2		7 4		52 27	$32\frac{11}{16}$ 1		$12\frac{19}{40}$ 1	
5 2	5 2		3 2		34 15	$29\frac{5}{8}$ 1		$11\frac{1}{4}$ 1	
5 2	5 2		5 4		316 125	$26\frac{9}{16}$ 1		$10\frac{1}{40}$ 1	
5 2	5 2		even		73 25	$23\frac{1}{2}$ 1		$8\frac{4}{5}$ 1	

4th. Against your winning the first and second and losing the third.		5th. Against your losing the first, and winning the second and third.		6th. Against your losing the first and second, and winning the third.		7th. Against your winning the first and third, and losing the second.		8th. Against your losing the first and third, and winning the second.	
$6\frac{1}{9}$ *to*	1	$6\frac{1}{9}$ *to*	1	$20\frac{1}{3}$ *to*	1	$6\frac{1}{9}$ *to*	1	$20\frac{1}{3}$ *to*	1
$5\frac{2}{9}$	1	$6\frac{7}{15}$	1	$21\frac{2}{5}$	1	$6\frac{7}{15}$	1	$17\frac{2}{3}$	1
$4\frac{1}{3}$	1	7	1	23	1	7	1	15	1
$3\frac{8}{9}$	1	$7\frac{8}{21}$	1	$24\frac{1}{7}$	1	$7\frac{8}{21}$	1	$13\frac{2}{5}$	1
$3\frac{4}{9}$	1	$7\frac{8}{9}$	1	$25\frac{2}{3}$	1	$7\frac{8}{9}$	1	$12\frac{1}{3}$	1
3	1	$8\frac{9}{15}$	1	$27\frac{4}{5}$	1	$8\frac{9}{15}$	1	11	1
$2\frac{5}{9}$	1	$9\frac{2}{3}$	1	31	1	$9\frac{2}{3}$	1	$9\frac{2}{3}$	1
$5\frac{8}{15}$	1	$6\frac{21}{25}$	1	$18\frac{3}{5}$	1	$5\frac{8}{15}$	1	$18\frac{3}{5}$	1
$4\frac{9}{15}$	1	$7\frac{2}{5}$	1	20	1	6	1	$15\frac{4}{5}$	1
$4\frac{2}{15}$	1	$7\frac{4}{5}$	1	21	1	$6\frac{1}{3}$	1	$14\frac{2}{5}$	1
$3\frac{2}{3}$	1	$8\frac{1}{3}$	1	22	1	$6\frac{7}{9}$	1	13	1
$3\frac{1}{5}$	1	$9\frac{2}{25}$	1	$24\frac{1}{5}$	1	$7\frac{2}{5}$	1	$11\frac{3}{5}$	1
$2\frac{11}{15}$	1	$10\frac{1}{5}$	1	27	1	$8\frac{1}{3}$	1	$10\frac{1}{5}$	1
5	1	8	1	17	1	5	1	17	1
$4\frac{1}{2}$	1	$8\frac{3}{7}$	1	$17\frac{6}{7}$	1	$5\frac{2}{7}$	1	$15\frac{1}{2}$	1
4	1	9	1	19	1	$5\frac{2}{3}$	1	14	1
$3\frac{1}{2}$	1	$9\frac{4}{5}$	1	$20\frac{3}{5}$	1	$6\frac{1}{5}$	1	$12\frac{1}{2}$	1
3	1	11	1	23	1	7	1	11	1
$4\frac{16}{21}$	1	$8\frac{43}{49}$	1	$16\frac{2}{7}$	1	$4\frac{16}{21}$	1	$16\frac{2}{7}$	1
$4\frac{5}{21}$	1	$9\frac{10}{21}$	1	$17\frac{1}{3}$	1	$5\frac{1}{9}$	1	$14\frac{5}{7}$	1
$3\frac{5}{7}$	1	$10\frac{11}{35}$	1	$18\frac{4}{5}$	1	$5\frac{3}{5}$	1	$13\frac{1}{7}$	1
$3\frac{4}{21}$	1	$11\frac{4}{7}$	1	21	1	$6\frac{1}{3}$	1	$11\frac{4}{7}$	1
$4\frac{5}{9}$	1	$10\frac{1}{9}$	1	$15\frac{2}{3}$	1	$4\frac{5}{9}$	1	$15\frac{2}{3}$	1
4	1	11	1	17	1	5	1	14	1
$3\frac{4}{9}$	1	$12\frac{1}{3}$	1	19	1	$5\frac{2}{3}$	1	$12\frac{1}{3}$	1
$4\frac{2}{5}$	1	$11\frac{24}{25}$	1	$15\frac{1}{5}$	1	$4\frac{2}{5}$	1	$15\frac{1}{5}$	1
$3\frac{4}{5}$	1	$13\frac{2}{5}$	1	17	1	5	1	$13\frac{2}{5}$	1
$4\frac{1}{3}$	1	15	1	15	1	$4\frac{1}{3}$	1	15	1
$5\frac{43}{50}$	1	$5\frac{43}{50}$	1	$16\frac{3}{20}$	1	$5\frac{43}{50}$	1	$16\frac{3}{20}$	1
$4\frac{22}{25}$	1	$6\frac{7}{20}$	1	$17\frac{3}{8}$	1	$6\frac{7}{20}$	1	$13\frac{7}{20}$	1
$4\frac{39}{100}$	1	$6\frac{49}{70}$	1	$18\frac{1}{4}$	1	$6\frac{49}{70}$	1	$12\frac{19}{40}$	1
$3\frac{9}{10}$	1	$7\frac{1}{6}$	1	$19\frac{5}{12}$	1	$7\frac{1}{6}$	1	$11\frac{1}{4}$	1
$3\frac{41}{100}$	1	$7\frac{41}{50}$	1	$21\frac{1}{20}$	1	$7\frac{41}{50}$	1	$10\frac{1}{40}$	1
$2\frac{23}{25}$	1	$8\frac{4}{5}$	1	$23\frac{1}{2}$	1	$8\frac{4}{5}$	1	$8\frac{4}{5}$	1

Three Events, all in your favour.					1st. Against your winning them all.	2d. Against your losing all.	3d. Against your winning the first, and losing the second and third.
5 to 2	2 to 1		2 to 1		43 to 20	$30\frac{1}{2}$ to 1	$11\frac{3}{5}$ to 1
5 2	2 1		7 4		161 70	$27\frac{7}{8}$ 1	$10\frac{11}{26}$ 1
5 2	2 1		3 2		5 2	$25\frac{1}{4}$ 1	$9\frac{1}{2}$ 1
5 2	2 1		5 4		139 50	$22\frac{5}{8}$ 1	$8\frac{9}{20}$ 1
5 2	2 1		even		32 10	20 1	$7\frac{2}{5}$ 1
5 2	7 4		7 to 4		86 35	$25\frac{15}{32}$ 1	$9\frac{47}{80}$ 1
5 2	7 4		3 2		8 3	$23\frac{1}{16}$ 1	$8\frac{5}{8}$ 1
5 2	7 4		5 4		74 27	$20\frac{21}{32}$ 1	$7\frac{53}{80}$ 1
5 2	7 4		even		$3\frac{2}{5}$ 1	$18\frac{1}{4}$ 1	$6\frac{7}{10}$ 1
5 2	3 2		3 to 2		26 9	$20\frac{7}{8}$ 1	$7\frac{3}{4}$ 1
5 2	3 2		5 4		$3\frac{1}{5}$ 1	$18\frac{11}{16}$ 1	$6\frac{7}{80}$ 1
5 2	3 2		even		11 3	$16\frac{1}{2}$ 1	6 1
5 2	5 4		5 to 4		$3\frac{67}{125}$ 1	$16\frac{23}{32}$ 1	$6\frac{7}{80}$ 1
5 2	5 4		even		101 25	$14\frac{3}{4}$ 1	$5\frac{3}{10}$ 1
5 2	even		even		23 5	13 1	$4\frac{3}{5}$ 1
2 1	2 to 1		2 to 1		19 8	26 1	$12\frac{1}{2}$ 1
2 1	2 1	AND	7 4	ARE	71 28	$23\frac{3}{4}$ 1	$11\frac{3}{8}$ 1
2 1	2 1		3 2		33 12	$21\frac{1}{2}$ 1	$10\frac{1}{4}$ 1
2 1	2 1		5 4		61 20	$19\frac{1}{4}$ 1	$9\frac{1}{8}$ 1
2 1	2 1		even		$3\frac{1}{2}$ 1	17 1	8 1
2 1	7 4		7 to 4		265 98	$21\frac{11}{16}$ 1	$10\frac{11}{32}$ 1
2 1	7 4		3 2		41 14	$19\frac{5}{8}$ 1	$9\frac{5}{16}$ 1
2 1	7 4		5 4		227 70	$17\frac{9}{16}$ 1	$8\frac{9}{32}$ 1
2 1	7 4		even		52 14	$15\frac{1}{2}$ 1	$7\frac{1}{4}$ 1
2 1	3 2		3 to 2		57 18	$17\frac{3}{4}$ 1	$8\frac{3}{8}$ 1
2 1	3 2		5 4		$3\frac{1}{2}$ 1	$15\frac{7}{8}$ 1	$7\frac{7}{16}$ 1
2 1	3 2		even		4 1	14 1	$6\frac{1}{2}$ 1
2 1	5 4		5 to 4		$3\frac{43}{50}$ 1	$14\frac{3}{16}$ 1	$6\frac{19}{32}$ 1
2 1	5 4		even		44 10	$12\frac{1}{2}$ 1	$5\frac{3}{4}$ 1
2 1	even		even		5 1	11 1	5 1
7 4	7 to 4		7 to 4		988 343	$19\frac{51}{64}$ 1	$10\frac{99}{112}$ 1
7 4	7 4		3 2		458 147	$17\frac{29}{32}$ 1	$9\frac{45}{56}$ 1
7 4	7 4		5 4		844 245	$16\frac{1}{64}$ 1	$8\frac{31}{112}$ 1
7 4	7 4		even		$3\frac{46}{49}$ 1	$14\frac{1}{8}$ 1	$7\frac{9}{14}$ 1

4th. Against your winning the first and second, and losing the third.	5th. Against your losing the first, and winning the second and third.	6th. Against your losing the first and second, and winning the third.	7th. Against your winning the first and third, and losing the second.	8th. Against your losing the first and third, and winning the second.
$5\frac{3}{10}$ *to* 1	$6\frac{7}{8}$ *to* 1	$14\frac{3}{4}$ *to* 1	$5\frac{3}{10}$ *to* 1	$14\frac{3}{4}$ *to* 1
$4\frac{31}{40}$ 1	$7\frac{1}{4}$ 1	$15\frac{1}{2}$ 1	$5\frac{3}{5}$ 1	$13\frac{7}{16}$ 1
$4\frac{1}{4}$ 1	$7\frac{3}{4}$ 1	$16\frac{1}{2}$ 1	6 1	$12\frac{1}{8}$ 1
$3\frac{29}{40}$ 1	$8\frac{9}{20}$ 1	$17\frac{9}{10}$ 1	$6\frac{14}{25}$ 1	$10\frac{13}{16}$ 1
$3\frac{1}{5}$ 1	$9\frac{1}{2}$ 1	20 1	$7\frac{2}{5}$ 1	$9\frac{1}{2}$ 1
$5\frac{1}{20}$ 1	$7\frac{63}{98}$ 1	$14\frac{1}{8}$ 1	$5\frac{1}{20}$ 1	$14\frac{1}{8}$ 1
$4\frac{1}{2}$ 1	$8\frac{1}{6}$ 1	$15\frac{1}{24}$ 1	$5\frac{5}{12}$ 1	$12\frac{3}{4}$ 1
$3\frac{19}{20}$ 1	$8\frac{9}{10}$ 1	$16\frac{1}{40}$ 1	$5\frac{93}{100}$ 1	$11\frac{3}{8}$ 1
$3\frac{2}{5}$ 1	10 1	$18\frac{1}{4}$ 1	$6\frac{7}{10}$ 1	10 1
$4\frac{5}{6}$ 1	$8\frac{13}{18}$ 1	$13\frac{7}{12}$ 1	$4\frac{5}{6}$ 1	$13\frac{7}{12}$ 1
$4\frac{1}{4}$ 1	$9\frac{1}{2}$ 1	$14\frac{3}{4}$ 1	$5\frac{3}{10}$ 1	$12\frac{1}{8}$ 1
$3\frac{1}{3}$ 1	$10\frac{2}{3}$ 1	$16\frac{1}{2}$ 1	6 1	$10\frac{2}{3}$ 1
$4\frac{67}{100}$ 1	$10\frac{17}{59}$ 1	$13\frac{7}{40}$ 1	$4\frac{67}{100}$ 1	$13\frac{7}{40}$ 1
$4\frac{1}{25}$ 1	$11\frac{3}{5}$ 1	$14\frac{3}{4}$ 1	$5\frac{3}{10}$ 1	$11\frac{3}{5}$ 1
$4\frac{3}{5}$ 1	13 1	13 1	$4\frac{3}{5}$ 1	13 1
$5\frac{3}{4}$ 1	$5\frac{3}{4}$ 1	$12\frac{1}{2}$ 1	$5\frac{3}{4}$ 1	$12\frac{1}{2}$ 1
$5\frac{3}{16}$ 1	$6\frac{1}{14}$ 1	$13\frac{1}{7}$ 1	$6\frac{1}{14}$ 1	$11\frac{3}{8}$ 1
$4\frac{5}{8}$ 1	$6\frac{1}{2}$ 1	14 1	$6\frac{1}{2}$ 1	$10\frac{1}{4}$ 1
$4\frac{1}{16}$ 1	$7\frac{1}{10}$ 1	$15\frac{1}{5}$ 1	$7\frac{1}{10}$ 1	$9\frac{1}{8}$ 1
$3\frac{1}{2}$ 1	8 1	17 1	8 1	8 1
$5\frac{27}{56}$ 1	$6\frac{20}{49}$ 1	$11\frac{27}{28}$ 1	$5\frac{27}{36}$ 1	$11\frac{27}{28}$ 1
$4\frac{25}{28}$ 1	$6\frac{6}{7}$ 1	$12\frac{3}{4}$ 1	$5\frac{7}{8}$ 1	$10\frac{11}{14}$ 1
$4\frac{17}{56}$ 1	$7\frac{17}{35}$ 1	$13\frac{17}{20}$ 1	$6\frac{17}{40}$ 1	$9\frac{17}{28}$ 1
$3\frac{5}{7}$ 1	$8\frac{3}{7}$ 1	$15\frac{1}{2}$ 1	$7\frac{1}{4}$ 1	$8\frac{3}{7}$ 1
$5\frac{1}{4}$ 1	$7\frac{1}{3}$ 1	$11\frac{1}{2}$ 1	$5\frac{1}{4}$ 1	$11\frac{1}{2}$ 1
$4\frac{15}{24}$ 1	8 1	$12\frac{1}{2}$ 1	$5\frac{3}{4}$ 1	$10\frac{1}{4}$ 1
4 1	9 1	14 1	$6\frac{1}{2}$ 1	9 1
$5\frac{3}{40}$ 1	$8\frac{13}{25}$ 1	$11\frac{3}{20}$ 1	$5\frac{3}{40}$ 1	$11\frac{3}{20}$ 1
$4\frac{2}{5}$ 1	$9\frac{4}{5}$ 1	$12\frac{1}{2}$ 1	$5\frac{3}{4}$ 1	$9\frac{4}{5}$ 1
5 1	11 1	11 1	5 1	11 1
$5\frac{155}{196}$ 1	$5\frac{155}{196}$ 1	$10\frac{99}{112}$ 1	$5\frac{155}{196}$ 1	$10\frac{99}{112}$ 1
$5\frac{17}{98}$ 1	$6\frac{17}{84}$ 1	$11\frac{29}{48}$ 1	$6\frac{17}{84}$ 1	$9\frac{45}{56}$ 1
$4\frac{109}{196}$ 1	$6\frac{109}{140}$ 1	$12\frac{49}{90}$ 1	$6\frac{109}{146}$ 1	$8\frac{81}{112}$ 1
$3\frac{46}{49}$ 1	$7\frac{9}{14}$ 1	$14\frac{1}{8}$ 1	$7\frac{9}{14}$ 1	$7\frac{9}{14}$ 1

Three Events, all in your Favour.					1st. Col. Against your winning them all.		2d. Against your losing all.		3d. Against your winning the first, and losing the second and third.	
7 to 4	3 to 2		3 to 2		$3\frac{23}{63}$	1	$16\frac{3}{16}$ to	1	$8\frac{23}{28}$ to	1
7 4	3 2		5 4		$3\frac{6}{7}$	1	$14\frac{15}{32}$	1	$7\frac{47}{56}$	1
7 4	3 2		*even*		$4\frac{5}{21}$	1	$12\frac{3}{4}$	1	$6\frac{6}{7}$	1
7 4	5 4		5 to 4		$4\frac{16}{175}$	1	$12\frac{59}{64}$	1	$6\frac{107}{112}$	1
7 4	5 4		*even*		$4\frac{23}{35}$	1	$11\frac{3}{8}$	1	$6\frac{1}{14}$	1
7 4	*even*		*even*		$5\frac{2}{7}$	1	10	1	$5\frac{2}{7}$	1
3 2	3 to 2		3 to 2		$3\frac{17}{27}$	1	$14\frac{5}{8}$	1	$9\frac{5}{12}$	1
3 2	3 2		5 4		4	1	$13\frac{1}{16}$	1	$8\frac{9}{24}$	1
3 2	3 2	AND	*even*	ARE	$4\frac{5}{9}$	1	$11\frac{1}{2}$	1	$7\frac{1}{3}$	1
3 2	5 4		5 to 4		$4\frac{2}{5}$	1	$11\frac{21}{32}$	1	$7\frac{7}{16}$	1
3 2	5 4		*even*		5	1	$10\frac{1}{4}$	1	$6\frac{1}{2}$	1
3 2	*even*		*even*		$5\frac{2}{3}$	1	9	1	$5\frac{2}{3}$	1
5 4	5 to 4		5 to 4		$4\frac{104}{125}$	1	$10\frac{25}{64}$	1	$8\frac{9}{80}$	1
5 4	5 4		*even*		$5\frac{12}{25}$	1	$9\frac{1}{8}$	1	$7\frac{1}{10}$	1
5 4	*even*		*even*		$6\frac{1}{5}$	1	8	1	$6\frac{1}{5}$	1
even	*even*		*even*		7	1	7	1	7	1

4th. Against your winning the first and second, and losing the third.		5th. Against your losing the first, and winning the second and third.		6th. Against your losing the first and second, and winning the third.		7th. Against your winning the first and third, and losing the second.		8th. Against your losing the first and third, and winning the second.	
$5\frac{23}{42}$	*to* 1	$6\frac{23}{36}$	*to* 1	$10\frac{11}{24}$	*to* 1	$5\frac{23}{42}$	*to* 1	$10\frac{11}{24}$	*to* 1
$4\frac{25}{28}$	1	$7\frac{1}{4}$	1	$11\frac{3}{8}$	1	$6\frac{1}{14}$	1	$9\frac{5}{16}$	1
$4\frac{5}{21}$	1	$8\frac{1}{6}$	1	$12\frac{3}{4}$	1	$6\frac{6}{7}$	1	$8\frac{1}{6}$	1
$5\frac{51}{140}$	1	$7\frac{91}{100}$	1	$10\frac{11}{80}$	1	$5\frac{51}{140}$	1	$10\frac{1}{80}$	1
$4\frac{23}{35}$	1	$8\frac{9}{10}$	1	$11\frac{3}{8}$	1	$6\frac{1}{14}$	1	$8\frac{9}{10}$	1
$5\frac{2}{7}$	1	10	1	10	1	$5\frac{2}{7}$	1	10	1
$5\frac{17}{18}$	1	$5\frac{17}{18}$	1	$9\frac{5}{12}$	1	$5\frac{17}{18}$	1	$9\frac{5}{12}$	1
$5\frac{1}{4}$	1	$6\frac{1}{2}$	1	$10\frac{1}{4}$	1	$6\frac{1}{2}$	1	$8\frac{9}{24}$	1
$4\frac{5}{9}$	1	$7\frac{1}{3}$	1	$11\frac{1}{2}$	1	$7\frac{1}{3}$	1	$7\frac{1}{3}$	1
$5\frac{3}{4}$	1	$7\frac{1}{10}$	1	$9\frac{1}{8}$	1	$5\frac{3}{4}$	1	$9\frac{1}{8}$	1
5	1	8	1	$10\frac{1}{4}$	1	$6\frac{1}{2}$	1	8	1
$5\frac{2}{3}$	1	9	1	9	1	$5\frac{2}{3}$	1	9	1
$6\frac{29}{100}$	1	$6\frac{29}{100}$	1	$8\frac{9}{80}$	1	$6\frac{29}{100}$	1	$8\frac{9}{80}$	1
$5\frac{12}{25}$	1	$7\frac{1}{10}$	1	$9\frac{1}{8}$	1	$7\frac{1}{10}$	1	$7\frac{1}{10}$	1
$6\frac{1}{5}$	1	8	1	8	1	$6\frac{1}{5}$	1	8	1
7	1	7	1	7	1	7	1	7	1

EXPLANATIONS

OF THE

FOREGOING TABLES.

SUPPOSE you have Three Events depending, on the first of which it is six to one for you, on the second and third it is three to one and two to one against you, and that you want to know what the odds are against your winning them all, you are to look for the page and line where 6 to 1, 3 to 1, and 2 to 1, all in your favour, stand in the third column where it is written at the top against your winning the first and losing the second and third, in which you will find it to be thirteen to one against you; and is operated thus:— $\frac{6}{7} \times \frac{1}{4} \times \frac{1}{3} = \frac{6}{84}$, $84 - 6 = 78$ to 6, which being contracted, is thirteen to one, as in the table.

Suppose

Suppose it to be five to two for you on the first, five to two and five to four against you on the second and third, what are the odds by the tables against your winning them all? —Look for the line wherein you have 5 to 2, 5 to 2, and 5 to 4, all in your favour, and in the third column you have $10\frac{1}{40}$ to 1.—The operation stands thus: $\frac{5}{7}\times\frac{2}{7}\times\frac{4}{9}=\frac{40}{441}$: $441-40=401$ to 40, and contracted, by dividing 401 by 40, you will have $10\frac{1}{40}$ to 1, as in the table.

Suppose it to be four to one against you on the first, three to one for you on the second, and three to two for you on the third, what are the odds by the tables against your winning them all? Look for the line where it stands four to one, three to one, and three to two, all in your favour, and in the fifth column (marked, against your losing the first, and winning the second and third) you will see it to be $10\frac{1}{9}$ to 1, as per operation $\frac{1}{5}\times\frac{3}{4}\times\frac{3}{5}=\frac{9}{100}$, as per tables.

I flatter myself that these explanations on the tables of Three Events, with those on Two Events, will be a sufficient guide to search out the odds on any dependence that may

may occur in them; for were I to give any more examples, it might be attended with too much prolixity:—therefore I will finish with making this observation—which is, that these tables not only serve to give a solution, but may be of great utility to those who are inclinable to practice by them, so as to make themselves perfect and capable in finding the odds to any two or three complicated events that may happen.

FINIS.

1928